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ABSTRACT

This continuing education document enhances classroom teachers' capacity to address problems and foster social, emotional, intellectual, and behavioral development. Module 1 presents the context for understanding the problems schools face, noting why every school must develop an enabling component to address barriers to learning. It discusses: the need for a comprehensive, multifaceted, and integrated approach to addressing barriers to learning and promoting healthy development; a framework for an enabling component; enhancing regular classroom strategies to enable learning for all; and emphasizing mutual support, caring, and a sense of community. Module 2 examines the basics of classroom-focused enabling, describing how teachers can: transform the larger class by developing small learning groups and independent learning options to enhance student engagement; facilitate positive learning; prevent problems; and provide special assistance. The practices discussed engender well-managed classrooms and accomplish this in ways that minimize the overreliance on social control strategies. Module 3 explores the role teachers can take in ensuring their schools provide a context that supports and enhances classroom learning, discussing the need for a schoolwide enabling component, school-community partnerships, and better attention from the Board of Education to addressing barriers to learning. (Modules contain references.) (SM)

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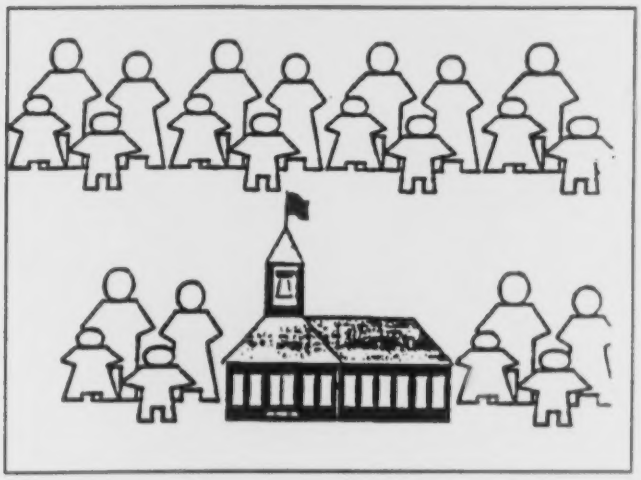
Continuing Education

Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling

February, 2001



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The center is co-directed by Howard Adelman and Linda Taylor and operates under the auspices of the School Mental Health Project, Dept. of Psychology, UCLA, Los Angeles, CA 90095-1563 **Phone: (310) 825-3634.**

Support comes in part from the U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health, with co-funding from the Substance Abuse and Mental Health Services Administration's Center for Mental Health Services.

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HRSA
Health Resources and Services Administration
Maternal and Child Health Bureau

CMHS
Center for Mental Health Services
SAMHSA
Substance Abuse & Mental Health Services Administration

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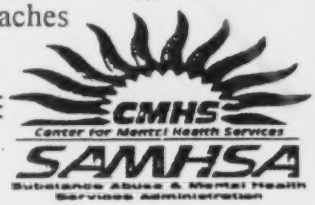
The *Center for Mental Health in Schools* operates under the auspices of the School Mental Health Project at UCLA.* It is one of two *national centers* concerned with mental health in schools that are funded in part by the U.S. Department of Health and Human Services, Office of Adolescent Health, Maternal and Child Health Bureau, Health Resources and Services Administration -- with co-funding from the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (Project #U93 MC 00175).

The UCLA Center approaches mental health and psychosocial concerns from the broad perspective of addressing barriers to learning and promoting healthy development. In particular, it focuses on comprehensive, multifaceted models and practices to deal with the many external and internal barriers that interfere with development, learning, and teaching. Specific attention is given policies and strategies that can counter marginalization and fragmentation of essential interventions and enhance collaboration between school and community programs. In this respect, a major emphasis is on enhancing the interface between efforts to address barriers to learning and prevailing approaches to school and community reforms.



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Preface

I have come to believe that a great teacher is a great artist . . . . [Teaching may] even be the greatest of the arts since the medium is the human mind and spirit.

John Steinbeck

Teaching is one of the most demanding professions. It is particularly difficult in school settings where a large proportion of the student body are not performing well. And, with efforts to raise standards and hold teachers accountable, job stress is increasing.

The problem is exacerbated by the growing teacher shortage. More and more schools must employ novices, including individuals with little or no pre-service teacher preparation. And many of these newcomers are placed in schools where a large proportion of students come to class each day not particularly enthusiastic about what they are expected to do and often without the background of knowledge and skills to connect with the day's lesson plans. Thus, the growing realities are that

- increasing numbers of teachers have not had the opportunity to learn how to teach students who manifest commonplace learning, behavior, and emotional problems

- most teachers must learn on-the-job how to teach such students.

This set of continuing education modules is designed as an aid for addressing these realities.

- Module I provides a big picture context for understanding the problems schools face and why every school must develop a component to address barriers to learning. Such a component is referred to as an Enabling Component – a component designed to enable learning by addressing barriers to learning. As outlined in Module I, this component encompasses six programmatic areas. One of these areas is designated as *Classroom-Focused Enabling* – which is designed to enhance classroom teachers' capacity to address problems and foster social, emotional, intellectual, and behavioral development.

- Module II focuses on the nuts and bolts of Classroom-Focused Enabling – covering how teachers can transform the larger class by developing small learning groups and independent learning options in order to enhance student engagement, facilitate positive learning, prevent problems, and provide special assistance. The practices discussed engender well-managed classrooms and accomplish this in ways that minimize the overreliance on "social control" strategies that have come to characterize too many teacher-student interactions. The aim, of course, is to enhance student achievement and to do so in an environment that engenders a sense of community and mutual caring in classrooms and throughout a school.

- Module III explores the role teachers can take in ensuring their schools provide a context that supports and enhances classroom learning.

The set of modules represents our attempt to delineate a preservice/inservice preparation curriculum covering how regular classrooms and schools should be designed to ensure *all* students have appropriate opportunities to learn effectively. This, of course, includes the many who manifest commonplace behavior, learning, and emotional problems Our Center has developed the set of modules with the intent of placing them in the hands of school administrators, teacher educators, teachers, school support staff, those who train pupil service personnel, community members, and others. In addition, we are making this content directly available to everyone as a form of independent continuing education.

As is the case with the development of all our Center's products, many staff and graduate and undergraduate students have contributed to this work. Of particular note is the many hours spent by Ashley Borders, Taraneh Roohi, and Perry Nelson, but many others over many years have shaped the contents. The material represents a timely and progressive approach to the topic. At the same time, the content, like the field itself, is seen as in a state of continuous evolution. Thus, we are extremely interested in receiving your feedback. In the coming years, we expect to improve and refine the modules based on feedback from the field. If you care to provide feedback at this stage, please do so by sending us your comments.

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To Self-Study Users of this Work:

The material in this continuing education document is designed as an evolving set of modules and units. The material can be read and taught in a straight forward sequence, or one or more parts can be combined into a personalized course. This design allows learners to approach the material as they would use an Internet website (i.e., exploring specific topics of immediate interest and then going over the rest in any order that feels comfortable). The first module is meant to start you off with a big picture framework for understanding barriers to learning and how school reforms need to expand in order to effectively address such barriers. This is essential if all youngsters are to have an equal opportunity to succeed at school. Each of the units in the second module focus on classroom practices. Finally. the third module explores the roles teachers need to play in ensuring their school develops a comprehensive approach to addressing barriers to learning.

To the Learner

Beginning each section are specific objectives meant to help guide reading and review. Interspersed throughout each section are boxed exhibits designed to help you think a bit more about specific ideas and practices. A good way to start is simply to browse through the Table of Contents and scan anything you think may be of use to you. We recommend reading Module I as soon as you have the time. Then, do an in depth review of a unit that focuses on the matter that is of greatest concern to you at this time.

To enrich the work, we have included some suggested activities (labeled *Stop, think, discuss*). Most of these can be done alone, but they will be more profitable learning experiences if you create a study group with one or more interested learners. Also, you will find references to some accompanying readings which are intended to enrich your learning. These and various resource aids that you might find useful are packaged separately.

To Curriculum Designers Adopting this Material

This material can be incorporated into various formats:

(1) self-study (individual or group)

(2) participation in workshops (a continuing education series; a sequence of district -wide inservice sessions)

(3) media and computer courses (instructional television -- live, and if feasible, interactive; video or audiotaped courses; computer-assisted instruction; a website offering)

(4) a professional journal offering a continuing education series.

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Module I

Objectives

The intent in this Module is to help you learn more about:

(1) *barriers to student learning* (After going over the material, be sure you can identify at least three categories of external barriers to student learning.)

(2) *the basic features of*

(a) *a comprehensive, multifaceted approach to addressing barriers to student learning* (After going over the material, be sure you can identify three systems that comprise a comprehensive continuum of interventions.)

(b) *an Enabling Component for a school site* (After going over the material, be sure you can identify the six "curriculum" areas of an Enabling Component.)

(c) *an approach to classroom instruction designed to enable learning for all students* (After going over the material, be sure you can differentiate individualized from personalized instruction.).

(3) *why schools need to focus on enhancing mutual support, caring, and a sense of community* (After going over the material, be sure you can discuss at least three reasons a caring climate at school is important.).

Do not follow where
the path may lead.
Go, instead, where
there is no path
and leave a trail.

Module I

Why isn't instructional reform leading to success for all students?

> Teachers today face classrooms with diverse student populations and are expected to be culturally sensitive and to have skills for teaching a wide range of students . . . . Although social changes, legislative decisions, and educational innovations now make the heterogeneity of classrooms more apparent, the truth is there was never such a thing as a homogeneous classroom; our schools have always been diverse. . . . The implications of diversity for teachers, schools, and education include changes in curriculum, pedagogy, teacher education, and school organization and climate.
>
> Maria Sapon-Shevin

Teachers, teacher educators, school reformers, policy makers, parents, and students all are aware of a simple truth:

> *Too many teachers know too little about how best to support and guide students who manifest commonplace behavior, learning, and emotional problems.*

In saying this, we are not teacher-bashing. We have the highest respect and empathy for anyone who pursues the call to work with young people. The problem is that teachers are not being taught the fundamentals of how to help those youngsters who do not come to school each day motivationally ready and able to learn.

In keeping with prevailing demands for higher standards and achievement test scores, the focus of school reform and preservice teacher training is mainly on curriculum content and instruction. Analyses indicate that implicit in most instructional reforms is a presumption that lessons are being taught to students who are motivationally ready and able to absorb the content and carry out the processes. It is recognized that the teacher may have to deal with some misbehavior and learning problems, but this tends to be treated as a separate matter calling for classroom management and individualized instruction. That is, learning and behavior problems often are not viewed as an indication that the presumption of readiness was inappropriate for some, and often, many students.

As a result, preservice teacher preparation provides little or no discussion of what to do when students are not motivationally ready and able to respond appropriately to a lesson as taught. This lapse in training is less a problem for teachers in classrooms where few students are doing poorly. In settings where large proportions of students are not doing well, however, and especially where many students are "acting out," teachers decry the gap in their training.

In such settings, one of the overriding inservice concerns is to enhance whatever a teacher has previously been taught about "classroom management." Typically, schools offer a few, relatively brief sessions on various social control techniques (e.g., eye contact, physical proximity, being alert and responding quickly before a behavior escalates, using rewards as a preventive strategy, assertive discipline, threats and other forms of punishment). All this, of course, skirts right by the matter of what is causing student misbehavior and ignores the reality that social control practices can be incompatible with enhancing student engagement with learning at school. Indeed, such practices can lead to greater student disengagement.

> *In general, then, there remains a major disconnect between what teachers need to learn and what they are taught about addressing student problems -- and too little is being done about it.*

There also is a great gap between what schools as a whole do and what they need to do about such problems (and, again, too little is being done about this).

> *As a result, too many students are "referred out" for special attention and too many eventually "dropout" of school.*

We hasten to stress that, in highlighting this state of affairs, we do not mean to minimize the importance of thorough and ongoing training related to curriculum and instruction. Every teacher must have the ability and resources to bring a sound curriculum to life and apply strategies that make learning meaningful. At the same time, however, every teacher must learn how to "enable" learning in the classroom by addressing barriers to learning and teaching – especially factors leading to low or negative motivation for schooling.

All students need instruction that is a good match for both their motivation and capabilities (e.g., teaching that accounts for interests, strengths, weaknesses, and limitations; approaches that overcome avoidance motivation; structure that provides personalized support and guidance; instruction designed to enhance and expand intrinsic motivation for learning and problem solving). Some students also require added support, guidance, and special accommodations.

In this module, we cover the following topics. They are designed to help you think beyond current school reform initiatives and explore new ways to think about what schools and teachers can do to be successful with the wide range of youngsters they encounter each day.

A. Current School Reforms and Addressing Barriers to Student Learning

B. Needed: A Comprehensive, Multifaceted, and Integrated Approach to Addressing Barriers to Learning and Promoting Healthy Development

C. Moving to a 3 Component Model for School Reform

D. A Framework for an Enabling Component at a School Site

E. Enhancing Regular Classroom Strategies to Enable Learning for All

Step 1. Personalized Instruction: The Foundation of Classroom-Focused Enabling
Step 2. Special Classroom Assistance to Engage, Guide, and Support Those Students Who Need More

F. Keeping Mutual Support, Caring, and a Sense of Community in Mind

G. Concluding Comments

A Few Related References

Stop, think, discuss:

Form a study group and do some brainstorming about:

What makes a school a supportive and caring learning community?

A. Current School Reforms and Addressing Barriers to Student Learning

It is easy to say that schools must ensure that *all* students succeed. If all students came ready and able to profit from "high standards"curricula, then there would be little problem. But *all* encompasses those who are experiencing *external* and *internal* barriers that interfere with benefitting from what the teacher is offering. Thus, providing all students an equal opportunity to succeed requires more than higher standards and greater accoutability for instruction, better teaching, increased discipline, reduced school violence, and an end to social promotion. It also requires a comprehensive, multifaceted approach to barriers to learning and teaching.

As long as school reforms fail to address such barriers in comprehensive and multifaceted ways, especially in schools where large proportions of students are not doing well,

> *it will remain a myth to think that achievement test score averages can be meaningfully raised by focusing mainly on curriculum and instructional concerns and classroom management techniques.*

So, it is essential we begin with a brief reminder about the barriers that interfere with learning and what the role of schools should be in addressing such factors. In doing so, we underscore the need for an expanded view of current school reforms.

The notion of barriers to learning encompasses external and internal factors (see Table 1). It is clear that too many youngsters are growing up and going to school in situations that not only fail to promote healthy development, but are antithetical to the process. Some also bring with them intrinsic conditions that make learning and performing difficult. As a result, some youngsters at every grade level come to school unready to meet the setting's demands effectively.

Table 1

Barriers to Development and Learning

Based on a review of over 30 years of research, Hawkins and Catalano (1992) identify common risk factors that reliably predict such problems as youth delinquency, violence, substance abuse, teen pregnancy, and school dropout. These factors also are associated with such mental health concerns as school adjustment problems, relationship difficulties, physical and sexual abuse, neglect, and severe emotional disturbance. Such factors are not excuses for anyone not doing their best; they are, however, rather obvious impediments, and ones to which no good parent would willingly submit his or her child. The majority of factors identified by Hawkins and Catalano are external barriers to healthy development and learning.

External Factors*

Community

- Availability of drugs
- Availability of firearms
- Community laws and norms favorable toward drug use, firearms, and crime
- Media portrayals of violence
- Transitions and mobility
- Low neighborhood attachment and community disorganization
- Extreme economic deprivation

Family

- Family history of the problem behavior
- Family management problems
- Family conflict
- Favorable parental attitudes and involvement in the problem behavior

School

- Academic failure beginning in late elementary school

Peer

- Friends who engage in the problem behavior
- Favorable attitudes toward the problem behavior

Internal Factors (biological and psychological)

Differences (e.g., being further along toward one end or the other of a normal developmental curve; not fitting local "norms" in terms of looks and behavior; etc.)

Vulnerabilities (e.g., minor health/vision/hearing problems and other deficiencies/deficits that result in school absences and other needs for special accommodations; being the focus of racial, ethnic, or gender bias; economical disadvantage; youngster and or parent lacks interest in youngster's schooling, is alienated, or rebellious; early manifestation of severe and pervasive problem/antisocial behavior)

Disabilities (e.g., true learning, behavior, and emotional disorders)

*Other external factors include exposure to crisis events in the community, home, and school; lack of availability and access to good school readiness programs; lack of home involvement in schooling; lack of peer support, positive role models, and mentoring; lack of access and availability of good recreational opportunities; lack of access and availability to good community housing, health and social services, transportation, law enforcement, sanitation; lack of access and availability to good school support programs; sparsity of high quality schools.

At some time or another, most students bring problems with them to school that affect their learning and perhaps interfere with the teacher's efforts to teach. In some geographic areas, many youngsters bring a wide range of problems stemming from restricted opportunities associated with poverty and low income, difficult and diverse family circumstances, high rates of mobility, lack of English language skills, violent neighborhoods, problems related to substance abuse, inadequate health care, and lack of enrichment opportunities.

Such problems are exacerbated as youngsters internalize the frustrations of confronting barriers and the debilitating effects of performing poorly at school. In some locales, the reality often is that over 50% of students manifest forms of behavior, learning, and emotional problems. And, in most schools in these locales, teachers are ill-prepared to address the problems in a potent manner. Thus, when a student is not doing well, the trend increasingly is to refer them directly for counseling or for assessment in hopes of referral for special help – perhaps even special education assignment.

In some schools and classrooms, the number of referrals is dramatic. Where special teams have been established to review teacher requests for help, the list grows as the year proceeds. The longer the list, the longer the lag time for review – often to the point that, by the end of the school year, the team only has reviewed a small percentage of those on the list. *And, no matter how many are reviewed, there always are more referrals than can be served.*

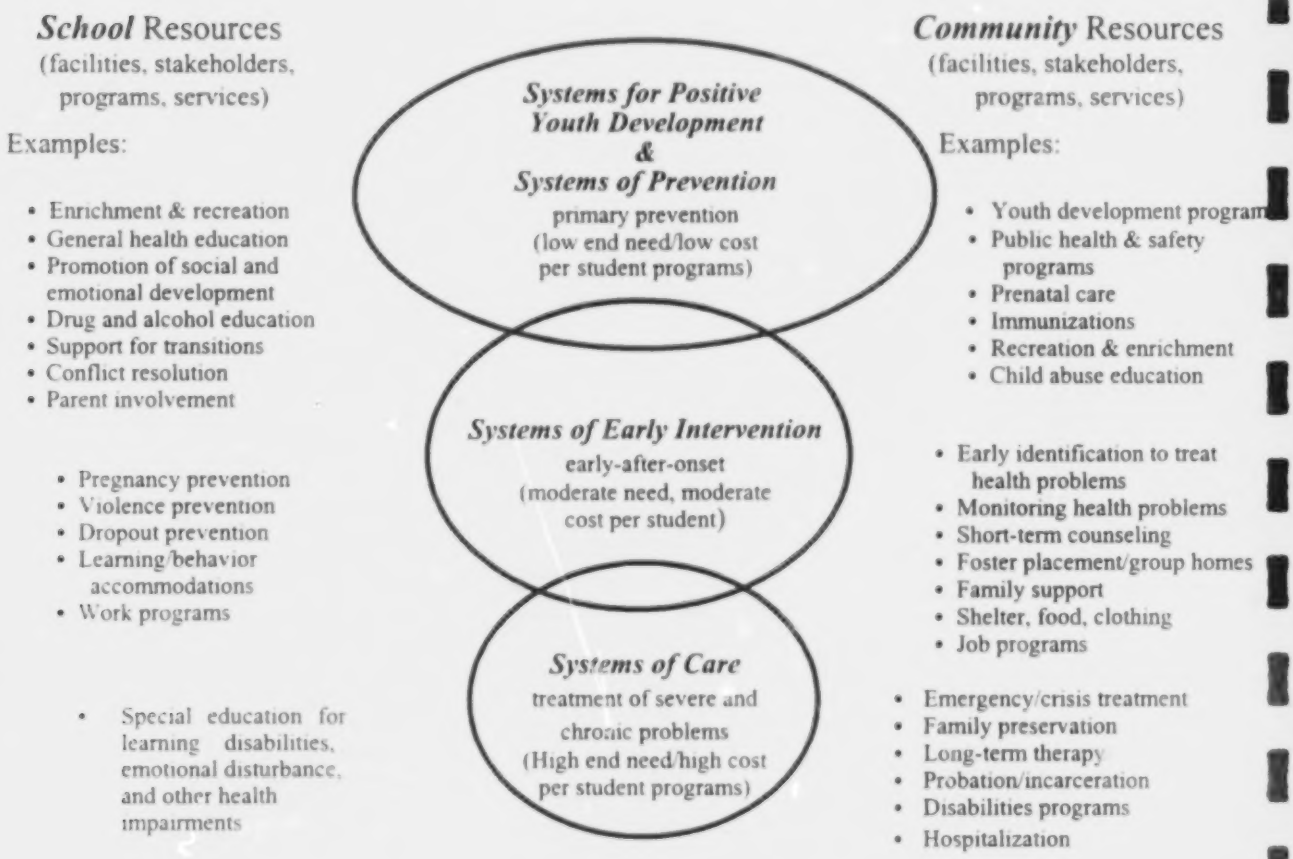
One solution might be to convince policy makers to fund more services. However, even if the policy climate favored expanding public services, more health and social services alone are not a comprehensive approach for addressing barriers to learning. More services to treat problems certainly are needed. But so are prevention and early-after-onset programs that can reduce the number of students teachers refer for special assistance.

The surprised principal, waving the achievement tests scores, confronts Ms. Smith, the second grade teacher.
"How did you get these low IQ students to do so well?"
"Low IQ?" she repeats with equal surprise. *"What do you mean, low IQ?"*
"Well, didn't you see their IQ scores on the list I sent you last fall?"
"Oh no!" Ms. Smith exclaims, *"I thought those were their locker numbers!"*

B. Needed: A Comprehensive, Multifaceted, and Integrated Approach to Addressing Barriers to Learning and Promoting Healthy Development

Ultimately, of course, addressing barriers to learning must be approached from a societal perspective and requires fundamental systemic reforms designed to improve efforts to support and enable learning. This calls for developing a continuum of community and school programs (see Figure 1).

Figure 1.

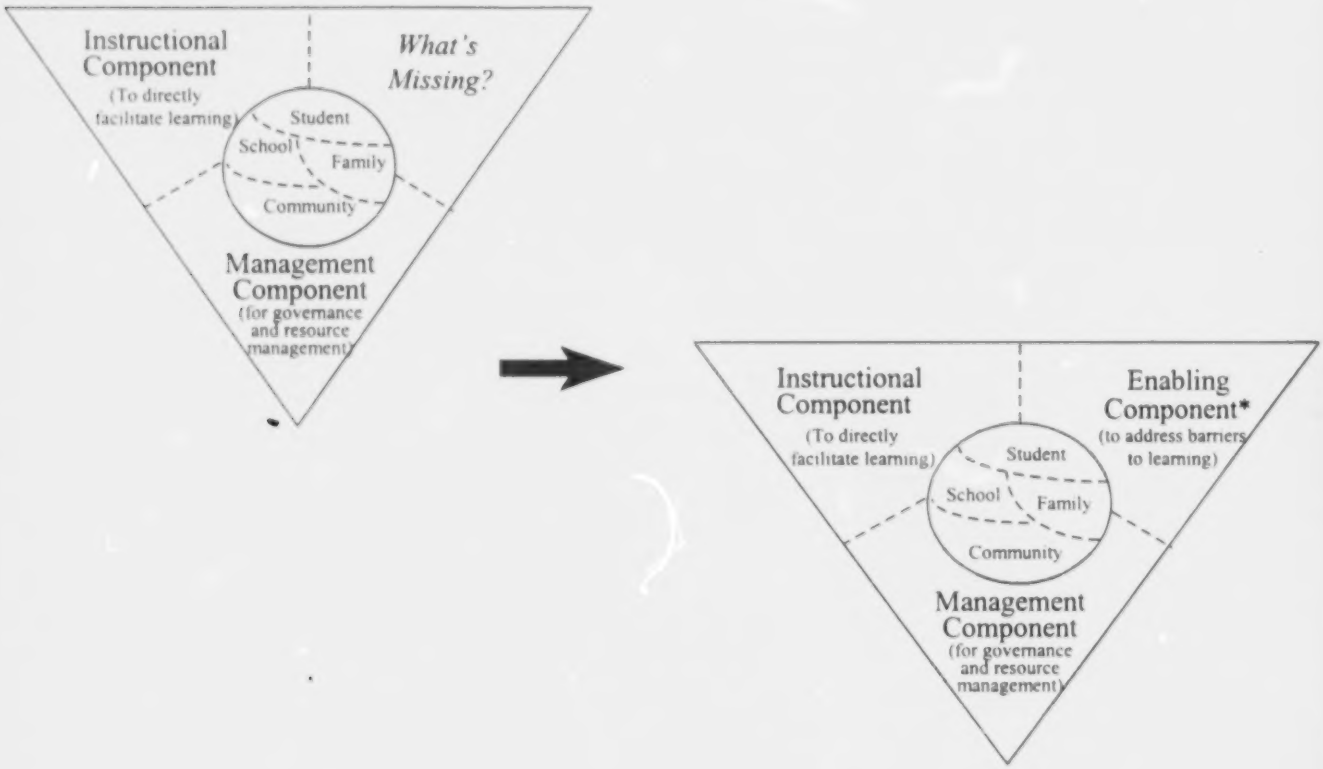


Such a continuum must be *comprehensive, multifaceted,* and *integrated* and woven into three overlapping systems: systems of prevention, systems of early intervention to address problems as soon after onset as feasible, and systems of care for those with chronic and severe problems.

C. Moving to a 3 Component Model for School Reform

With the full continuum in mind, pioneer initiatives around the country are demonstrating the need to rethink how schools and communities can meet the challenge of addressing persistent barriers to student learning. Such work points to the need to expand prevailing thinking about school reform. That is, it underscores that (a) current reforms are based on an inadequate two component model for restructuring schools and (b) movement to a three component model is necessary if schools are to benefit all young people appropriately (see Figure 2).

Figure 2. Moving from a two to a three component model for reform and restructuring



*The third component (an enabling component) is established in policy and practice as primary and essential and is developed into a comprehensive approach by weaving together school and community resources.

A three component model calls for elevating efforts to address barriers to development, learning, and teaching to the level of one of three fundamental and essential facets of education reform.

We call this third component an *Enabling Component*.

Enabling is defined as "providing with the means or opportunity; making possible, practical, or easy; giving power, capacity, or sanction to."

The concept of an Enabling Component is formulated around the proposition that a comprehensive, multifaceted, integrated continuum of enabling activity *is essential* in addressing the needs of youngsters who encounter barriers that interfere with their benefitting satisfactorily from instruction. Thus, to enable teachers to teach effectively, there must not only be effective instruction and well-managed schools, but barriers must be handled in a comprehensive way. All three components are seen as essential, complementary, and overlapping.

In establishing such a third component, some schools and education agencies around the country have labeled it a "Learning Supports" component or a "Supportive Learning Environment" component or a "Comprehensive Student Support System."

By calling for reforms that fully integrate a focus on addressing barriers to student learning, the notion of a third component (whatever it is called) provides a unifying concept for responding to a wide range of psychosocial factors interfering with young people's learning and performance. And, the concept calls on reformers to expand the current emphasis on improving instruction and school management to include a *comprehensive* component for addressing barriers to learning and to ensure it is well integrated with the other two components.

D. A Framework for an Enabling Component at a School Site

Operationalizing an enabling component requires (a) formulating a delimited framework of basic program areas and then (b) creating an infrastructure to restructure and enhance existing resources. Based on an extensive analysis of activity used to address barriers to learning, we cluster enabling activity into six interrelated areas (see Figure 3).

As can be seen in Figure 3, the six areas are concerned with:

(1) enhancing the classroom teacher's capacity to address problems and foster social, emotional, intellectual and behavioral development,

(2) enhancing the capacity of schools to handle the many transition concerns confronting students and their families,

(3) responding to, minimizing impact, and preventing crises,

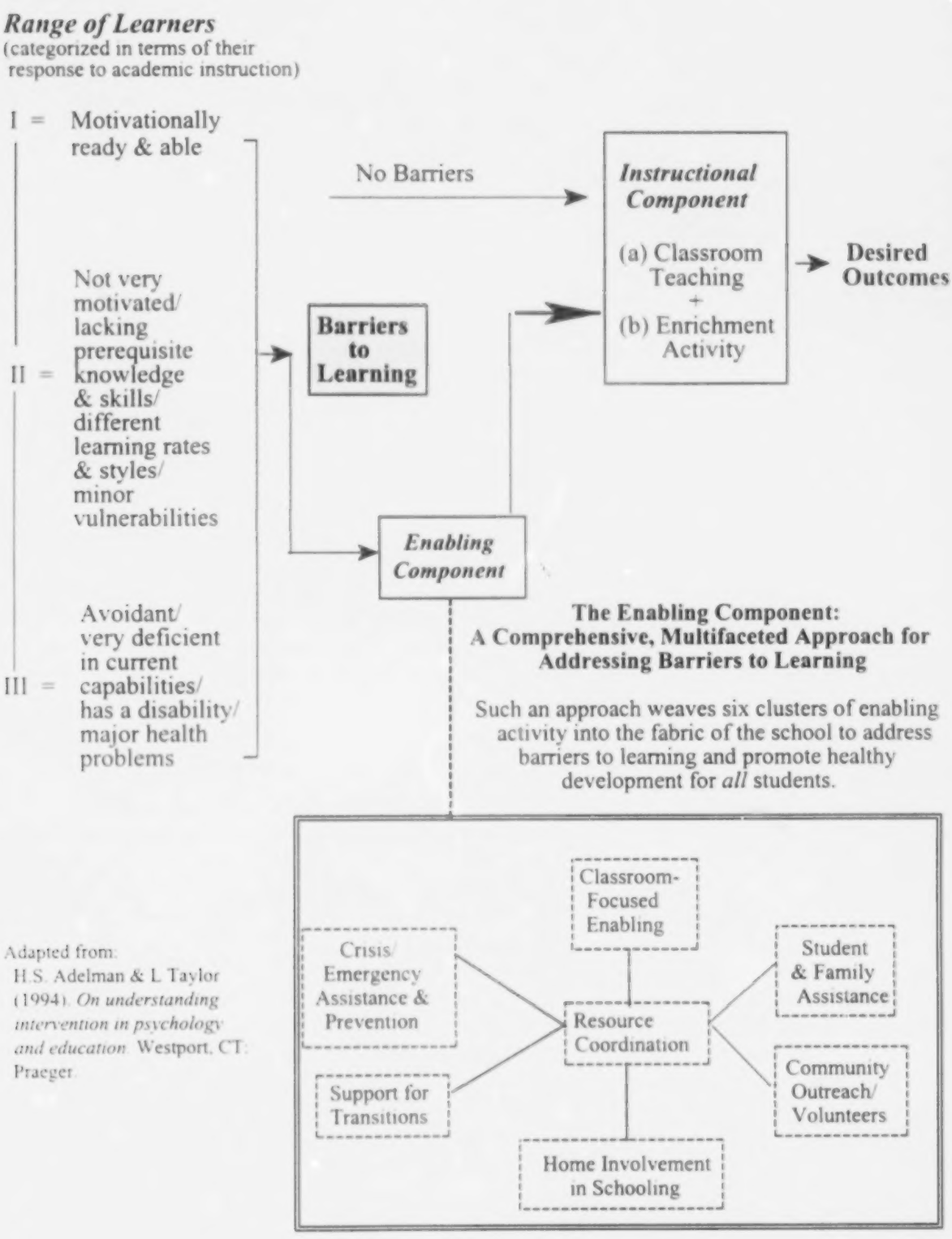
(4) enhancing home involvement,

(5) outreaching to the surrounding community to build linkages, and

(6) providing special assistance for students and families.

Each of these are briefly highlighted in Table 2.

Figure 3. An enabling component to address barriers to learning and enhance healthy development at a school site.


Range of Learners
(categorized in terms of their response to academic instruction)
I = Motivationally ready & able
II = Not very motivated/ lacking prerequisite knowledge & skills/ different learning rates & styles/ minor vulnerabilities
III = Avoidant/ very deficient in current capabilities/ has a disability/ major health problems
No Barriers
Instructional Component
(a) Classroom Teaching
+
(b) Enrichment Activity
Desired Outcomes
Barriers to Learning
Enabling Component
The Enabling Component:
A Comprehensive, Multifaceted Approach for Addressing Barriers to Learning
Such an approach weaves six clusters of enabling activity into the fabric of the school to address barriers to learning and promote healthy development for all students.
Classroom-Focused Enabling
Crisis/ Emergency Assistance & Prevention
Student & Family Assistance
Resource Coordination
Community Outreach/ Volunteers
Support for Transitions
Home Involvement in Schooling

Adapted from:
H.S. Adelman & L. Taylor (1994). *On understanding intervention in psychology and education*. Westport, CT: Praeger.

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Table 2

"Curriculum" Areas for an Enabling Component

(1) Enhancing teacher capacity for addressing problems and for fostering social, emotional, intellectual and behavioral development. When a classroom teacher encounters difficulty in working with a youngster, the first step is to see whether there are ways to address the problem within the classroom and perhaps with added home involvement. It is essential to equip teachers to respond to garden variety learning, behavior, and emotional problems using more than social control strategies for classroom management. Teachers must be helped to learn many ways to enable the learning of such students, and schools must develop school-wide approaches to assist teachers in doing this fundamental work. The literature offers many relevant practices. A few prominent examples are: prereferral intervention efforts, tutoring (e.g., one-to-one or small group instruction), enhancing protective factors, and assets building (including use of curriculum-based approaches to promoting social emotional development). Outcome data related to such matters indicate that they do make a difference (see accompanying Resource Aid Packet).

(2) Enhancing school capacity to handle the variety of transition concerns confronting students and their families. It has taken a long time for schools to face up to the importance of establishing transition programs. In recent years a beginning has been made. Transition programs are an essential facet of reducing levels of alienation and increasing levels of positive attitudes toward and involvement in school and learning activity. Thus, schools must plan, develop, and maintain a focus on transition concerns confronting students and their families. Examples of relevant practices are readiness to learn programs, before, during, and after school programs to enrich learning and provide safe recreation, articulation programs (for each new step in formal education, vocational and college counseling, support in moving to and from special education, support in moving to post school living and work), welcoming and social support programs, to and from special education programs, and school-to-career programs. Enabling successful transitions has made a significant difference in how motivationally ready and able students are to benefit from schooling.

(3) Responding to minimizing impact, and preventing crises. The need for crisis response and prevention is constant in many schools. Such efforts ensure assistance is provided when emergencies arise and follow-up care is provided when necessary and appropriate so that students are able to resume learning without undue delays. Prevention activity stresses creation of a safe and productive environment and the development of student and family attitudes about and capacities for dealing with violence and other threats to safety. Examples of school efforts include (1) systems and programs for emergency/crisis response at a site, throughout a complex/family of schools, and community-wide (including a program to ensure follow-up care) and (2) prevention programs for school and community to address safety and violence reduction, child abuse and suicide prevention, and so forth. Examples of relevant practices are establishment of a crisis team to ensure crisis response and aftermath interventions are planned and implemented, school environment changes and safety strategies, and curriculum approaches to preventing crisis events (violence, suicide, and physical/ sexual abuse prevention). Current trends stress school- and community-wide prevention programs.

(cont.)

Table 2 (cont). **"Curriculum" Areas for an Enabling Component**

(4) Enhancing home involvement. In recent years, the trend has been to expand the nature and scope of the school's focus on enhancing home involvement. Intervention practices encompass efforts to (1) address specific learning and support needs of adults in the home (e.g., classes to enhance literacy, job skills, ESL, mutual support groups), (2) help those in the home meet their basic obligations to their children, (3) improve systems to communicate about matters essential to student and family, (4) enhance the home-school connection and sense of community, (5) enhance participation in making decisions that are essential to the student, (6) enhance home support related to the student's basic learning and development, (7) mobilize those at home to problem solve related to student needs, and (8) elicit help (support, collaborations, and partnerships) from those at home with respect to meeting classroom, school, and community needs. The context for some of this activity may be a parent center (which may be part of the Family and Community Service Center Facility if one has been established at the site).

(5) Outreaching to the community to build linkages and collaborations. The aim of outreach to the community is to develop greater involvement in schooling and enhance support for efforts to enable learning. Outreach may be made to (a) public and private community agencies, colleges, organizations, and facilities, (b) businesses and professional organizations and groups, and (c) volunteer service programs, organizations and clubs. Efforts in this area might include 1) programs to recruit and enhance community involvement and support (e.g., linkages and integration with community health and social services; cadres of volunteers, mentors, and others with special expertise and resources; local businesses to adopt-a-school and provide resources, awards, incentives, and jobs; formal partnership arrangements), 2) systems and programs specifically designed to train, screen, and maintain volunteers (e.g., parents, college students, senior citizens, peer and cross-age tutors/counselors, and professionals-in-training to provide direct help for staff and students--especially targeted students), 3) outreach programs to hard-to-involve students and families (those who don't come to school regularly--including truants and dropouts), and 4) programs to enhance community-school connections and sense of community (e.g., orientations, open houses, performances and cultural and sports events, festivals and celebrations, workshops and fairs). A Family and Community Service Center Facility might be a context for some of this activity. (Note: When there is an emphasis on bringing community services to school sites, care must be taken to avoid creating a new form of fragmentation where community and school professionals engage in a form of parallel play at school sites.)

(6) Providing special assistance for students and families. Some problems cannot be handled without a few special interventions; thus the need for student and family assistance. The emphasis is on providing special services in a personalized way to assist with a broad range of needs. School-owned,- based, and -linked interventions clearly provide better access for many youngsters and their families. Moreover, as a result of initiatives that enhance school-owned support programs and those fostering school-linked services and school-community partnerships (e.g., full service schools, family resource centers, etc.), more schools have more to offer in the way of student and family assistance. In current practice, available social, physical and mental health programs in the school and community are used. Special attention is paid to enhancing systems for prereferral intervention, triage, case and resource management, direct services to meet immediate needs, and referral for special services and special education resources and placements as appropriate. A growing body of data indicates the current contribution and future promise of work in this area.

Unfortunatately, most school reformers seem unaware that if all students are to benefit from higher standards and improved instruction, schools must play a major role in developing such programs and systems. It is time for reform advocates to expand their emphasis on improving instruction and school management to include a comprehensive component for addressing barriers to learning, and they must pursue this third component with the same priority they devote to the other two.

E. Enhancing Regular Classroom Strategies to Enable Learning for All

Our concern here is with one of the six programmatic areas of an *Enabling Component*, namely, the one we call *Classroom-Focused Enabling*.

As stated above, when a classroom teacher encounters difficulty in working with a youngster, the first step is to see whether there are ways to address the problem within the classroom and perhaps with added home involvement. To this end, it is essential to equip teachers to respond to mild-to-moderate behavior, learning, and emotional problems using more than social control strategies for classroom management.

Teachers must be helped to learn many ways to enable the learning of such students, and schools must develop school-wide approaches to assist teachers in doing this fundamental work. The literature offers many relevant practices. A few prominent examples are: strategies to engage student interest and attention, one-to-one or small group instruction (e.g., tutoring, cooperative learning groups), enhancing protective factors, and assets building (including use of curriculum-based approaches to promoting social emotional development), as well as a variety of special assistance strategies.

All this, of course, overlaps the instructional component and expands definitions of good teaching to encompass practices that enable teachers to be effective with a wide range of students. From such a perspective, good teaching not only involves fostering a caring context for learning, it encompasses development of a classroom infrastructure that transforms a big classroom into a set of smaller units, as well as use of other strategies that prevent problems and address a wide range of problems when they arise – including procedures to elicit home involvement in solving problems.

Every teacher needs to be taught an array of strategies for accommodating and for teaching students to compensate for differences, vulnerabilities, and disabilities. Teachers need to learn how to use paid assistants, peer tutors, and volunteers to enhance social and academic support and to work in targeted ways with specific youngsters who manifest problems. Strategies must be developed for using resource and itinerant teachers and counselors and other student support professionals to work closely with teachers and students *in the classroom* and on regular activities. (Such matters, of course, have major implications for restructuring and redesigning the roles, functions, and staff development of such personnel, as well as for redeploying resources.)

Ultimately, any definition of good teaching must include effectively addressing a wide-range of problems within the regular classroom.

Teachers who can do this help reduce the need for specialized services and enhance the effectiveness of inclusionary policies.

- Accomplishing all of the above requires rethinking pre and inservice education for teachers, as well as for support staff, paraeducators and other paid assistants, and volunteers.

- It also involves rethinking the forms of temporary out-of-class student and family assistance that are provided.

Addressing barriers is not at odds with the "paradigm shift" that emphasizes strengths, resilience, assets, and protective factors (see Table 3). Efforts to enhance positive development and improve instruction clearly can improve readiness to learn. However, it is frequently the case that preventing problems also requires direct action to remove or at least minimize the impact of barriers, such as hostile environments and intrinsic problems (again see Table 1). Without an effective, direct intervention, such barriers can continue to get in the way of development and learning.

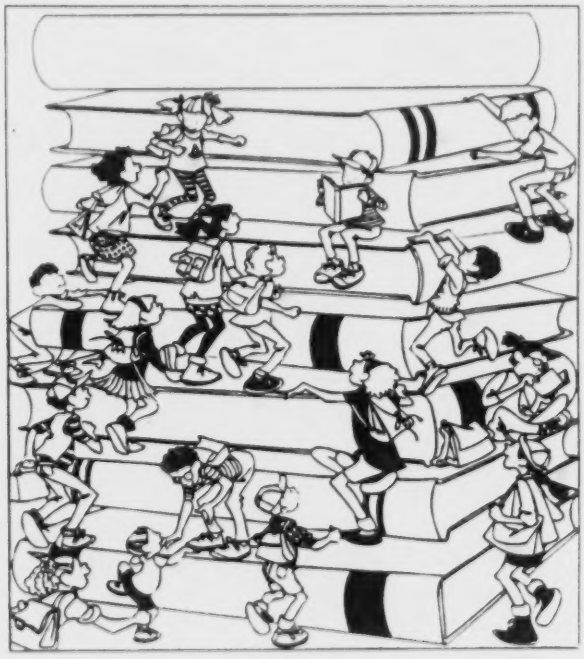


Table 3

Resiliency & Protective Factors

> Kids can walk around trouble if there is some place to walk to and someone to walk with.
>
> *Tito. Quoted by Milbey McLaughlin, Merita Irby, and Juliet Langman. 1993*

From: Center for Mental HealthServices, SAMHSA, DHHS (Feb., 1999)

According to researchers:

Protective factors hold the key to understanding how to reduce risks and how to encourage positive behavior and social development.

Hawkins and Catalano provide the following list of protective factors:

I. Individual Characteristics – Some children are born with characteristics that help protect them against problems as they grow older and are exposed to risk. These include:

- *Gender.* Given equal exposure to risk, girls are less likely than boys to develop health and behavior problems in adolescence.
- *Resilient temperament.* Children who adjust to change or recover from disruption easily are more protected from risk.
- *Outgoing Personality.* Children who are outgoing, enjoy being with people, and engage easily with others are more protected.
- *Intelligence.* Bright children appear to be more protected from risk than are less intelligent children.

II. Healthy Beliefs and Clear Standards – Parents, teachers, and community members who hold clearly stated expectations regarding young children and adolescent behavior help protect them from risk. When family rules and expectations are consistent with, and supported by other key influences on children and adolescents--school, peers, media, and larger community--the young person is buffered from risk even more.

III. Bonding – One of the most effective ways to reduce children's risk of developing problem behaviors is to strengthen their bonds with family members, teachers, and other socially responsible adults. Children living in high-risk environments can be protected from behavior problems by a strong, affectionate relationship with an adult who cares about, and is committed to, their healthy development.

The most critical aspect of this relationship is that the young person has a long term investment in the relationship and that he/she believes that the relationship is worth protecting (Hawkins and Catalano, 1992). Hawkins and Catalano (1998) have identified three *protective processes* that build strong bonds between young people and the significant adults in their lives.

- *Opportunities for involvement.* Strong bonds are built when young people have opportunities to be involved in their families, schools, and communities -- to make a real contribution and feel valued for it.
- *Skills for successful involvement.* In order for young people to take advantage of the opportunities provided in their families, schools, and communities, they must have the skills to be successful in that involvement. These skills may be social skills, academic skills or behavioral skills.
- *Recognition for involvement.* If we want young people to continue to contribute in meaningful ways, they must be recognized and valued for their involvement.

****

It is important to stress that, besides its focus on addressing barriers to student learning (including preventing them if feasible), an enabling component embraces a focus on healthy development. That is, it is built on the assumption that society has the responsibility to promote healthy development *and* address barriers. Thus, the approach is not a case of a negative vs. a positive emphasis (or excusing or blaming anyone). It's not about what's wrong vs. what's right with kids. It is about continuing to face up to the reality of major extrinsic barriers, as well as personal vulnerabilities and real disorders and disabilities.

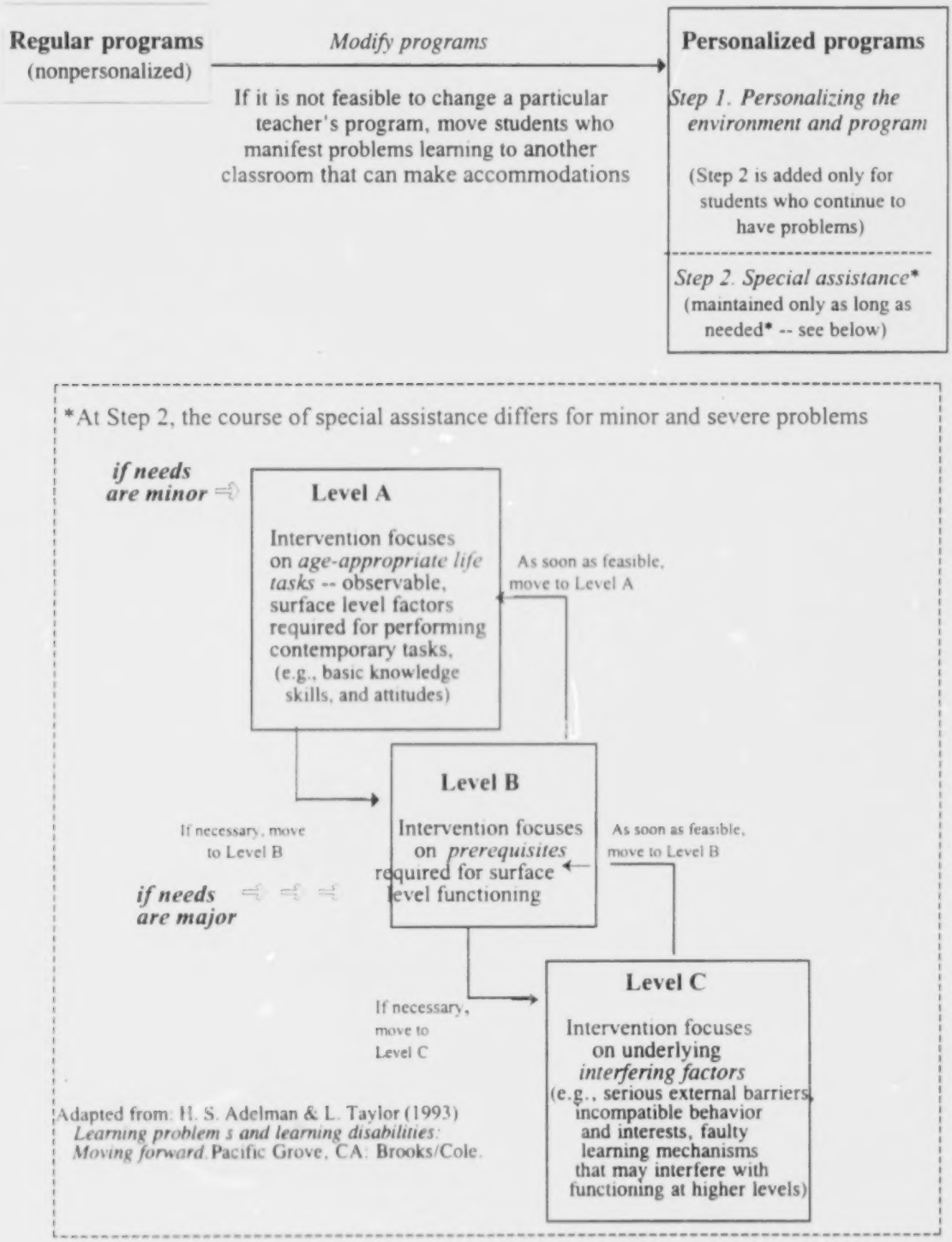
****

Classroom teaching that addresses barriers to learning can be conceived as involving two steps. As illustrated in Figure 4, Step 1 is personalization of the classroom program. In effect, personalization amounts to enhancing an appropriate match with individual differences in motivation and capability. Thus, decisions about general curriculum goals for a student are based on assessment of the individual's interests and abilities.

After a personalized program is properly implemented, it is to be expected that, though mobilized to try harder, some students will continue to have some problems (e.g., those students whose difficulties are the result of significant external factors and/or interfering internal factors such as a true disability). Therefore, Step 2 involves special assistance that is added on top of a well designed personalized program. Depending on problem severity and pervasiveness, special assistance involves one (or more) of three levels of focus.

- Level A pursues observable problems related to age-appropriate life tasks (basic knowledge, skills, and interests).
- Level B focuses on missing prerequisites for learning.
- Level C looks for factors interfering with learning (e.g., serious and pervasive external barriers, extreme avoidance motivation, disabilities, serious interfering behaviors sometimes related to emotional disorders).

Figure 4. Sequences and levels in teaching a wide-range of students in the regular classroom.


Regular programs
(nonpersonalized)
Modify programs
If it is not feasible to change a particular teacher's program, move students who manifest problems learning to another classroom that can make accommodations
Personalized programs
Step 1. Personalizing the environment and program
(Step 2 is added only for students who continue to have problems)
Step 2. Special assistance*
(maintained only as long as needed* -- see below)
*At Step 2, the course of special assistance differs for minor and severe problems
if needs are minor
Level A
Intervention focuses on age-appropriate life tasks -- observable, surface level factors required for performing contemporary tasks, (e.g., basic knowledge skills, and attitudes)
As soon as feasible, move to Level A
Level B
Intervention focuses on prerequisites required for surface level functioning
If necessary, move to Level B
As soon as feasible, move to Level B
if needs are major
Level C
Intervention focuses on underlying interfering factors
(e.g., serious external barriers, incompatible behavior and interests, faulty learning mechanisms that may interfere with functioning at higher levels)
If necessary, move to Level C
Adapted from: H. S. Adelman & L. Taylor (1993) Learning problem s and learning disabilities: Moving forward. Pacific Grove, CA: Brooks/Cole.

Procedures used for personalizing instruction and providing special assistance must reflect a primary and systematic focus on motivation. In particular, they should emphasize (a) assessing motivation, (b) overcoming negative attitudes, (c) enhancing motivational readiness for learning, (d) maintaining intrinsic motivation throughout the learning process, and (e) nurturing the type of continuing motivation that results in the learner engaging in activities away from the teaching situation. Attending to these matters is seen as essential to maximizing maintenance, generalization, and expansion of learning. Failure to attend systematically and comprehensively to these matters means approaching passive (and often hostile) learners. (We will explore all this in some detail in Module II.)

A few more words about the two steps illustrated in Figure 4 should help clarify the framework presented.

Step 1. Personalized Instruction:
The Foundation of Classroom-Focused Enabling

By now, it should be clear that a classroom infrastructure that enables a teacher to *personalize* instruction is at the foundation of efforts to enable classroom learning. Some teachers use the terms individualization and personalization of instruction interchangeably. *We don't.* Although both terms are intended to describe the process of "meeting learners where they are," individualization often is used for approaches that primarily emphasize accounting for differences in capability (and often only with respect to a few areas of development).

As a classroom concept, we stress that personalization should refer to the need to meet a learner where s/he is in terms of capabilities *and* with respect to *motivation* – especially interests, attitudes, and other *intrinsic motivational* considerations. That is, personalization should encompass a broad, concerted, and systematic emphasis on motivation, as well as on knowledge and skills when planning, implementing, and evaluating instruction. Moreover, this emphasis should reflect an appreciation of the fact that motivational differences often must be attended to before an accurate assessment can be made of capabilities and before students will respond well to classroom instruction.

From a psychological perspective, personalization is further defined in terms of learner *perceptions*. That is, the matter of whether one has "met a learner where (s)he is" can be viewed as dependent on how the learner experiences learning tasks and environments. A teacher may think a good match has been made, but if the student doesn't experience it as such, the instructional effort probably isn't meaningfully personalized.

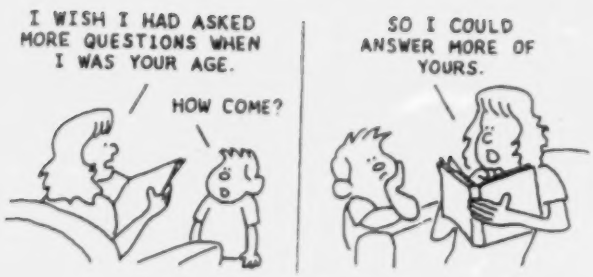
Some Basic Assumptions Underlying Personalized Programs

- Learning is a function of the ongoing transactions between the learner and the learning environment (with all it encompasses).
- Optimal learning is a function of an optimal match between the learner's accumulated capacities and attitudes and current state of being and the program's processes and content.
- Matching both a learner's motivation and pattern of acquired capacities must be primary procedural objectives.
- The learner's perception is the critical criterion for evaluating whether a good match exists between the learner and the learning environment.
- The wider the range of options that can be offered and the more the learner is made aware of the options and has a choice about which to pursue, the greater the likelihood that he or she will perceive the match as a good one.
- Besides improved learning, personalized programs enhance intrinsic valuing of learning and a sense of personal responsibility for learning. Furthermore. such programs increase acceptance and even appreciation of individual differences, as well as independent and cooperative functioning and problem solving.

Properly implemented, personalization can help establish a classroom atmosphere that encourages mutual support and caring and creates a sense of community. All this can play a role in preventing learning, behavior, and emotional problems. This probably is even more the case when the school-wide context fosters a sense of personal caring and mutual support, and probably is further enhanced when the surrounding neighborhood is supportive and caring.

Personalization is seen as necessary and often sufficient in addressing behavior, learning, and emotional problems in the classroom. Some students, however, need something more. Sometimes the "something more" is called remediation, but at a time when education is trying to move away from thinking of students as having "deficits," another term may have to be found. Here, we will use the term specialized assistance. Specialized assistance is called for when the best general practices are found wanting. Specialized assistance is needed to address major motivational and behavioral problems and for students who have difficulty learning, performing, or retaining what they have learned. Fortunately, however, most students usually are motivationally ready and able to function in some learning arenas, and thus, specialized assistance in all facets of classroom instruction and activity usually is unnecessary.

To address barriers to student learning, pioneering initiatives are improving classroom and school-wide environments to prevent problems and enhance youngsters' strengths. At the same time, for those who need something more, teachers, the school, and the community, working separately and together, provide essential supports and assistance



Step 2. Special Classroom Assistance to Engage, Guide, and Support Those Students Who Need More

A significant number of problems may be alleviated and others prevented through personalized instruction. General strategies, however, often are not enough. At times, any student may need special classroom assistance to engage, guide, and support performance and learning. Such assistance may just be an extension of general strategies. However, when the best application of general strategies is ineffective, it may also include intensive forms of specialized strategies in- and out-of-the classroom. In all cases, the intent is to improve the match between the program and a learner's current levels of motivation and capability.

> It is important to remember that special classroom assistance is an extension of general efforts to facilitate learning. Thus, before such a focus is introduced, the best available personalized instruction should be tried.

The capability of providing effective special assistance in the classroom is the key to reducing the number of students who are retained and/or referred to special education. Effective special assistance in the classroom also can help reduce misbehavior, suspensions, expulsions, and dropouts.

Perhaps the major factor differentiating special classroom assistance from regular teaching is the need for a teacher to find ways to establish an appropriate match for learners who are having problems. Often, a great deal of the process is a matter of trial and appraisal. Thus, those available to work with the youngster in the classroom (e.g., the teacher, an aide, a volunteer, a resource teacher) must take the time to develop an understanding of the learner (e.g., strengths, weaknesses -- including missing prerequisites and interfering behaviors and attitudes, limitations, likes, dislikes). There also must be access to, control over, and willingness to use a wide range of learning options and accommodations. And, there may be a necessity to reduce levels of abstraction, intensify the way stimuli are presented and acted upon, and increase the amount and consistency of guidance and support -- including added reliance on other resources.

When Is it Needed? Stated simply, an individual needs special assistance when general strategies for personalizing instruction are found to be insufficient (e.g., for those who manifest motivation problems and for those who have difficulty learning or retaining what they have learned).

The level of special assistance on which to focus with respect to any curricular goal is determined by assessing an individual's responses to daily instruction. Special assistance objectives are formulated initially through dialogue with the learner to generate processes and outcomes that are valued and that are perceived as attainable. General goals and specific objectives are modified through ongoing dialogues informed by analyses of task performance, supplemented with formal assessment devices when necessary.

Because special assistance in all areas usually is unnecessary, as much learning as possible will probably continue to be facilitated without special approaches. Besides facilitating learning, personalized instruction provides an essential foundation and context for all added special strategies.

It should be stressed that special assistance is not synonymous with either special education or special placements. Once one escapes from the debate over *where* a youngster should be taught, the concern shifts to fundamental factors that must be considered in meeting students' learning, behavioral, and emotional needs and doing so with the least intervention.

- Is there a full array of programs and services designed to address factors interfering with learning and teaching (e.g., such as those outlined in Figure 1)?

- Is there an appropriate curriculum (that includes a focus on areas of strength and weakness and that encompasses prerequisites that may not have been learned, underlying factors that may be interfering with learning, and enrichment opportunities)?

- Do staff have the ability to personalize instruction/structure teaching in ways that account for the range of individual differences and disabilities in the classroom (accounting for differences in *both* motivation and capability and implementing special practices when necessary)?

- Does the student-staff ratio ensure the necessary time required for personalizing instruction, implementing remediation, and providing enrichment?

Levels of Special Assistance. As noted above, special assistance to facilitate learning can be applied at any of three levels (again see Figure 4).

> *Level A – Age-appropriate life tasks.* As part of day-by-day living at school, home, work, and in the neighborhood, life tasks involve a variety of basic knowledge, skills, and interests These include reading, writing, interpersonal and intrapersonal problem solving, and so forth. At this level, remediation essentially involves reteaching – but not with the same approach that has just failed. Alternative ways must be used when the student has had difficulty learning. This is accomplished by further modifying activities in ways likely to improve the match with the learners current levels of motivation and capability. Teachers can use a range of environmental factors to influence the match as well as techniques that enhance motivation, sensory intake, processing and decision making, and output.
>
> *Level B – Prerequisites.* At this level, the focus is on identifying and teaching missing prerequisites. Procedures are the same as those used in facilitating learning related to current life tasks.
>
> *Level C – Interfering factors.* At this level, we must face up to severe and pervasive external barriers and the possibility of faulty learning mechanisms. A variety of underlying problems have been suggested as interfering with learning. Special assistance strategies are designed to overcome such deficiencies by directly correcting the problems or indirectly compensating for them.

What makes special assistance different from general strategies is the range and/or the extreme degree and consistency with which they must be applied, as well as the focus on levels of functioning other than current life tasks. What makes special assistance effective (when it is) probably involves these considerations, along with the fact that the strategies are different from those a student has already tried and found ineffective. (Special procedures have the benefit of being novel and thus having motivational and attention-inducing value.) In general, then, best practices call for teachers to pursue the type of personalized strategies and special assistance described in Module II and to do so flexibly and with imagination and caring.

F. Keeping Mutual Support, Caring, and a Sense of Community in Mind

In clarifying one element of an enabling component, there is danger of losing the "big picture." Ultimately, within the school context, such a component and its various program areas must blend with the instructional and management/governance components in ways that create a school-wide atmosphere encouraging mutual support, caring, and a sense of community.

The degree to which a school can create such an atmosphere seems highly related to how well it is likely to prevent and ameliorate learning, behavior, and emotional problems. Thus, in developing an enabling component, there must be a constant focus on enhancing a supportive and caring context for learning in ways that contribute to a psychological sense of community.

> Throughout a school and in each classroom, a psychological sense of community exists when a critical mass of stakeholders are committed to each other *and* to the setting's goals and values, *and* they exert effort towards the goals and towards maintaining relationships with each other.

What is a psychological sense of community?

People can be together without feeling connected or feeling they belong or feeling responsible for a collective vision or mission. At school and in class, a psychological sense of community exists when a critical mass of stakeholders are committed to each other and to the setting's goals and values and exert effort toward the goals and maintaining relationships with each other.

A perception of community is shaped by daily experiences and probably is best engendered when a person feels welcomed, supported, nurtured, respected, liked, connected in reciprocal relationships with others, and a valued member who is contributing to the collective identity, destiny, and vision. Practically speaking, such feelings seem to arise when a critical mass of participants not only are committed to a collective vision, but also are committed to being and working together in supportive and efficacious ways.

That is, a conscientious effort by enough stakeholders associated with a school or class seems necessary for a sense of community to develop and be maintained. Such an effort must ensure effective mechanisms are in place to provide support, promote self-efficacy, and foster positive working relationships.

There is an obvious relationship between maintaining a sense of community and sustaining morale and minimizing burn out.

Building a sense of community and caring begins when students (and their families) first arrive at a school. Classrooms and schools can do their job better if students feel they are truly welcome and have a range of social supports. A key facet of welcoming encompasses effectively connecting new students with peers and adults who can provide social support and advocacy.

On an ongoing basis, caring in a classroom is best maintained through use of personalized instruction, regular student conferences, activity fostering social and emotional development, and opportunities for students to attain positive status.

Efforts to create a caring classroom climate benefit from programs for cooperative learning, peer tutoring, mentoring, advocacy, peer counseling and mediation, human relations, and conflict resolution.

A caring school culture pays special attention to students who have difficulty making friends. Some need just a bit of support to overcome the problem (e.g., a few suggestions, a couple of special opportunities). Some, however, need more help. They may be very shy, lacking in social skills, or may even act in negative ways that lead to their rejection. Whatever the reason, it is clear they need help if they and the school are to reap the benefits produced when individuals feel positively connected to each other. School staff (e.g., teacher, classroom or yard aide, counselor, support/resource staff) and parents can work together to help such students. This may include use of a "peer buddy" (e.g., a student with similar interests and temperament or one who will understand and be willing to reach out to the one who needs a friend), or it might involve creating regular opportunities for the student to work with others on shared activities/projects at and away from school (e.g., engage in cooperative tasks, be teammates for games, share special roles such as being classroom monitors). If the youngster really doesn't know how to act like a friend, it is necessary to teach some guidelines and social skills. There are, of course, a myriad of strategies that can contribute to students feeling positively connected to the classroom and school.

Given the importance of home involvement in schooling, attention also must be paid to creating a caring atmosphere for family members. Increased home involvement is more likely if families feel welcome and have access to social support at school. Thus, teachers and other school staff need to establish a program that effectively welcomes and connects families with school staff and other families to generate ongoing social support and greater participation in home involvement efforts.

Also, just as with students and their families, school staff need to feel truly welcome and socially supported. Rather than leaving this to chance, a caring school develops and institutionalizes a program to welcome and connect new staff with those with whom they will be working. And it does so in ways that effectively incorporates newcomers into the organization and builds their capacity to function effectively.

Mother to son: *Time to get up and go to school.*

Son: *I don't want to go. It's too hard and the kids don't like me.*

Mother: *But you have to go -- you're the principal.*

Needed: Care for the Teaching Staff

It is a simple truth:

If classrooms are to be caring environments,
teachers must feel good about themselves

Teaching is one of society's most psychologically demanding jobs, yet few schools have programs designed specifically to counter job stress and enhance staff feelings of well-being.

In discussing "burn-out," many writers have emphasized that, too often, teaching is carried out under highly stressful working conditions and without much of a collegial and social support structure. Recommendations usually factor down to strategies that reduce environmental stressors, increase personal capabilities, and enhance job and social supports.*

What tends to be ignored is that schools have no formal mechanisms to care for staff. As schools move toward local control, they have a real opportunity to establish formal mechanisms and programs that foster mutual caring. In doing so, special attention must be paid to transitioning in new staff and transforming working conditions to create appropriate staff teams whose members can support and nurture each other in the classroom, every day. Relatedly, classrooms should play a greater role in fostering students social-emotional development by ensuring such a focus is built into the curricula.

*Our center provides an overview of this topic in an introductory packet entitled: *Understanding and Minimizing Staff Burnout.*

And, the National Educational Association's Health Information Network has become involved in the *Teacher Stress Reduction Initiative* supported by the Dept. of Health and Human Service's Center for Mental Health Services. See www.neahin.org/mental health/stress.html

Fundamental to the above concerns and to improving instruction, it is evident that teachers need to work closely with other teachers and school personnel, as well as with parents, professionals-in-training, volunteers, and so forth. Collaboration and teaming are key facets of addressing barriers to learning. They allow teachers to broaden the resources and strategies available in and out of the classroom to enhance learning and performance. As Hargreaves cogently notes, the way to relieve "the uncertainty and open-endedness" that characterizes classroom teaching is to create "communities of colleagues who work collaboratively [in cultures of shared learning and positive risk-taking] to set their own professional limits and standards, while still remaining committed to continuous improvement. Such communities can also bring together the professional and personal lives of teachers in a way that supports growth and allows problems to be discussed without fear of disapproval or punishment."

Collaboration and collegiality are fundamental to morale and work satisfaction and to transforming classrooms into caring contexts for learning. Collegiality, however, cannot be demanded. As Hargreaves stresses, when collegiality is *mandated*, it can produce what is called *contrived collegiality* which tends to breed inflexibility and inefficiency. Contrived collegiality is compulsory, implementation-oriented, regulated administratively, fixed in time and space, and predictable. In contrast, *collaborative cultures* foster working relationships which are voluntary, development-oriented, spontaneous, pervasive across time and space, and unpredictable.

Collaborative cultures also can foster a school's efforts to organize itself into a learning community that personalizes inservice teacher education. Such "organizational learning" requires an organizational structure where, as Peter Senge stresses, "people continually expand their capabilities to understand complexity, clarify vision and improve shared mental models." This is accomplished by searching together for shared solutions to the organization's tasks and problems and acquiring and applying different kinds of expertise and leadership.

Finally, collaborative cultures recognize the need to build capacity for dealing with working relationship problems. Despite the best of intentions relationships often go astray, especially when staff become frustrated and angry because students don't respond in desired ways or seem not to be trying. To minimize relationship problems, inservice education must foster understanding of interpersonal dynamics and barriers to working relationships and sites must establish effective problem solving mechanisms to eliminate or at least minimize such problems.

Concluding Comment

Many schools have become isolated from their surrounding communities. Many teachers have become isolated in their classrooms. Many students and families feel alienated from schools and teachers. Diversity too often is viewed in terms of irreconcilable differences rather than a multifaceted base from which to draw resources to accomplish shared goals.

If school reforms are to be effective, schools must work toward taking their place as an integral and integrated part of the community. Some leaders for reform suggest schools need to be a major hub in a neighborhood -- a place where the neighborhood comes to learn and play together, share experiences and wisdom, nurture each other, and strengthen young people, families, and the fabric of community life. Some have a vision of a school as the heart of a neighborhood and the classroom as the student's home away from home.

The concept of an enabling component provides an umbrella for moving forward to ensure that students and families feel a positive bond with their school and its teachers, teachers work collegially in support of each other and the school's mission, and schools are precious resources throughout the neighborhood of which they are a part. The various facets of such a component focus on the barriers that must be addressed and do so in ways that build on the diversity of strengths found in all schools and communities.

Exhibit

Why should a school be the heart of a community and a classroom be a student's home away from home?

Schools often seem apart from the community

Most schools could do their job better if they were experienced as an integral and positive part of the community -- perhaps even as the heart of the community. Schools and classrooms often are seen as separate from the community in which they reside. This contributes to a lack of connection between school staff and parents, students, other community residents, and community agency personnel. Development of a caring, learning community requires creating positive connections between school and community.

School-community partnerships

For schools to be seen as an integral part of the community, steps must be taken to create and maintain collaborative partnerships between school and community with respect to weaving together (blending) learning opportunities, programs, services, and use of facilities, personnel, and other resources.

Opening-up use of the school site

Besides increasing home involvement in schools and schooling, schools must facilitate increased use of school sites as places where parents, families, and other community residents can engage in learning, recreation, enrichment, and can connect with services they need.

Welcoming and social support for students

Most classrooms can do their job better if students feel they are truly welcome and have a range of social supports. Thus, a major focus for school-community collaborative partnership is establishment of a program that effectively welcomes and connects new students with peers and adults at school who can provide social support and advocacy. In some cases, the concept of the *moving diamond* can be adapted to these ends.

Welcoming and social support for parents/families

Increased home involvement in school is more likely if families feel they are truly welcome and have a range of social supports. Thus, a major focus for school-community collaborative partnership is establishment of a program that effectively welcomes and connects newly enrolled families with other families, with school staff, and with ongoing social support and home involvement programs.

Volunteers

Parents, peers, and other volunteers help break down the barriers between school and community. Thus, a major focus for school-community collaborative partnership is establishment of a program that effectively recruits, screens, trains, and nurtures volunteers.

Helping students feel a sense of interpersonal connection

Personalized instruction and regular student conferencing, cooperative learning strategies, curriculum focused on fostering social and emotional development, opportunities to have special status, peer tutoring, peer counseling and mediation, human relations and conflict resolution programs, moving diamonds -- all can contribute to students feeling positively connected to the classroom.

A Few Related References*

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Adelman, H.S., & Taylor, L. (1994). *On understanding intervention in psychology and education.* Westport, CT: Praeger.

Adelman, H. S., & Taylor, L. (1997). Addressing barriers to learning: Beyond school-linked services and full service schools. *American Journal of Orthopsychiatry, 67,* 408-421

Adelman, H.S., & Taylor, L. (1998). Reframing mental health in schools and expanding school reform. *Educational Psychologist, 33,* 135-152.

Adelman, H.S., Taylor, L., & Schnieder, M.V. (1999). A svhool-wide component to address barriers to learning. *Reading & Writing Quarterly: Overcoming Learning Difficulties, 15,* 277-302.

Chaskin, R.J. & Rauner, D.M. (eds.) Youth and caring. A special section of the May 1995 issue of the *Phi Delta Kappan.*

Fowler, R.C., & Corley, K.K. (1996). Linking families, building communities. *Educational Leadership, 53,* 24-26.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age.* New York: Teachers College Press.

Hawkins, J.D., Catalano, R.F., & Morrison, D.M., et al. (1992). The Seattle Social Development Project: Effects of the first four years on protective factors and problem behaviors. In J. McCord and R.E. Tremblay (Eds.), *Preventing antisocial behavior: Interventions from birth through adolescence.* NY: Guilford Press.

Sapon-Shevin, M. (1996). Celebrating diversity, creating community: Curriculum that honors and builds on differences. In S. B. Stainback, & W.C. Stainback (Eds.), *Inclusion: A guide for educators.*. Paul H. Brookes Publishing Co: Baltimore, MD.

Sarason, S. (1996). *Revisiting "The culture of school and the problem of change."* New York: Teachers College Press.

Schorr, L.B. (1997). *Common purpose: Strengthening families and neighborhoods to rebuild American.* New York: Anchor Press.

Taylor, L., & Adelman, H.S. (1999). Personalizing classroom instruction to account for motivational and developmental differences. *Reading & Writing Quarterly: Overcoming Learning Difficulties, 15,* 255-276.

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

ACTIVITY: Self-study to Enhance Classroom-Focused Enabling

The following survey is one of a set designed as self-study instruments related to a school's programmatic areas for addressing barriers to learning. School stakeholders use such surveys to map and analyze the current status of their programs. The survey presented below looks at classroom efforts to enable learning.

This type of self-study is best done by teams. For example, a group of teachers could use the following survey to discuss their current efforts – how effective the processes are what's not being done, etc. Members of the team initially might work separately in filling out the items, but the real payoff comes from discussing them as a group. The instrument also can be used over time as a form of program quality review.

After the items are checked, an analysis is done of the status of the classroom efforts to enable learning among those students who have been having problems. A decision might be made that some existing activity is not a high priority and that the resources should be redeployed to help establish something that seems more important. Other activity may be seen as needing to be embellished so that it is more effective. Finally, decisions may be made regarding new desired activities. Of course, since not everything can be added at once, priorities and timelines must be established.

Alone or in a team, go ahead and do the survey now.

Survey (self-study) -- Classroom-Focused Enabling

Please indicate all items that apply	Yes	Yes but more of this is needed	No	If no, is this something you want?
A. What programs for *personalized professional development* are currently at the site?				
1. Are teachers clustered for support and staff development?	___	___	___	___
2. Are models used to provide demonstrations?	___	___	___	___
3. Are workshops and readings offered regularly?	___	___	___	___
4. Is there a regular focus on how to				
a. engage students in learning?	___	___	___	___
b. assist students who have commonplace learning, behavior, and emotional problems?	___	___	___	___
c. reengage students who appear unmotivated in class?	___	___	___	___
5. Is support available from those with special expertise such as				
a. members of the Student Success Team?	___	___	___	___
b. resource specialists and/or special education teachers?	___	___	___	___
c. members of special committees?	___	___	___	___
d. bilingual and/or other coordinators?	___	___	___	___
e. counselors?	___	___	___	___
f. other? (specify) _____	___	___	___	___
6. Does the school's inservice focus on teaching such personnel how to work directly with teachers in the classroom?	___	___	___	___
7. Is there a formal teacher mentoring program?	___	___	___	___
8. Is there staff social support?	___	___	___	___
9. Is there formal conflict mediation/resolution for staff?	___	___	___	___
10. Is there assistance in learning to use advanced technology?	___	___	___	___
11. Other (specify) _____	___	___	___	___

(cont.)

Survey -- Classroom-Focused Enabling (cont.)

	Yes	Yes but more of this is needed	No	If no, is this something you want?
B. What *supports* are available *in the classroom* to help students identified as having problems?				
1. Are "personnel" added to the class (or before/after school)?	___		___	
If yes, what types of personnel are brought in:				
a. aides (e.g. paraeducators; other paid assistants)?	___	___	___	___
b. older students?	___	___	___	___
c. other students in the class?	___	___	___	___
d. volunteers?	___	___	___	___
e. parents?	___	___	___	___
f. resource teacher?	___	___	___	___
g. specialists?	___	___	___	___
h. Other? (specify)_____	___	___	___	___
2. Are materials and activities upgraded to				
a. ensure there are enough basic supplies in the classroom?	___	___	___	___
b. increase the range of high-motivation activities (keyed to the interests of students in need of special attention)?	___	___	___	___
c. include advanced technology?	___	___	___	___
d. Other? (specify) _____	___	___	___	___
3. Are regular efforts to foster social and emotional development supplemented?	___	___	___	___
C. What is done to assist a teacher who has difficulty with limited English speaking students?				
1. Is the student reassigned?	___	___	___	___
2. Does the teacher receive professional development related to working with limited English speaking students?	___	___	___	___
3. Does the bilingual coordinator offer consultation?	___	___	___	___
4. Is a bilingual aide assigned to the class?	___	___	___	___
5. Are volunteers brought in to help (e.g., parents, peers)?	___	___	___	___
6. Other? (specify) _____	___	___	___	___
D. What types of technology are available to the teachers?				
1. Are there computers in the classroom?	___	___	___	___
2. Is there a computer lab?	___	___	___	___
3. Is computer assisted instruction offered?	___	___	___	___
4. Is there appropriate software?	___	___	___	___
5. Is there access to the Internet?	___	___	___	___
6. Are there computer literacy programs?	___	___	___	___
7. Are computer programs used to address ESL needs?	___	___	___	___
8. Does the classroom have video recording capability?	___	___	___	___
9. Is instructional TV used in the classroom?				
a. videotapes?	___	___	___	___
b. PBS?	___	___	___	___
10. Is there a multimedia lab?	___	___	___	___
11. Other? (specify)_____	___	___	___	___

(cont.)

Survey – Classroom-Focused Enabling (cont.)

	Yes	Yes but more of this is needed	No	If no, is this something you want?
E. What academic enrichment and adjunct programs do teachers use?				
1. Are library activities used regularly?	___	___	___	___
2. Is music/art used regularly?	___	___	___	___
3. Is health education also used for enrichment?	___	___	___	___
4. Are student performances regular events?	___	___	___	___
5. Are there several field trips a year?	___	___	___	___
6. Are there student council and other leadership opportunities?	___	___	___	___
7. Are there school environment projects such as				
a. mural painting?	___	___	___	___
b. horticulture/gardening?	___	___	___	___
c. school clean-up and beautification?	___	___	___	___
d. other? (specify)_____	___	___	___	___
8. Are there special school-wide events such as				
a. clubs and similar organized activities?	___	___	___	___
b. publication of a student newspaper?	___	___	___	___
c. sales events (candy, t shirts)?	___	___	___	___
d. poster contests?	___	___	___	___
e. essay contests?	___	___	___	___
f. a book fair?	___	___	___	___
g. pep rallies/contests?	___	___	___	___
h. attendance competitions?	___	___	___	___
i. attendance awards/assemblies?	___	___	___	___
j. other? (specify) _____	___	___	___	___
9. Are guest contributors used (e.g., guest speakers/performers)?	___	___	___	___
10. Other? (specify)_____	___	___	___	___
F. What programs for *temporary out of class help* are currently at the site?				
1. Is there a family center providing student and family assistance?	___	___	___	___
2. Are there designated problem remediation specialists?	___	___	___	___
3. Is there a "time out" room?	___	___	___	___
4. other? (specify) _____	___	___	___	___
G. Are there school-wide approaches for				
1. creating and maintaining a caring and supportive climate?	___	___	___	___
2. supporting high standards for positive behavior?	___	___	___	___

H What programs are used to train paraeducators, volunteers, and other "assistants" who come into the classrooms to work with students who need help?

_____ _____

_____ _____

_____ _____

I. Which of the following can teachers request as special interventions?				
1. family problem solving conferences	___	___	___	___
2. exchange of students as an opportunity for improving the match and for a fresh start	___	___	___	___
3. referral for specific services	___	___	___	___
4. other (specify) _____	___	___	___	___

(cont.

Survey – Classroom-Focused Enabling (cont.)

	Yes	Yes but more of this is needed	No	If no, is this something you want?
J. Is there ongoing training for teachers and other staff who are helping to develop the school's efforts to improve Classroom-Focused Enabling?	___	___	___	___

K. Please indicate below any other ways that are used at the school to assist a teacher's efforts to address barriers to students' learning.

_____ _____
_____ _____
_____ _____

L. Please indicate below other things you want the school to do to assist a teacher's efforts to address barriers to students' learning.

_____ _____
_____ _____
_____ _____

Module II
Enabling *All* Students to Succeed: What's a Teacher to Do?

> Good teachers want to do their best for *all* students. This, of course, reflects our society's commitment to equity, fairness, and justice. But, if this commitment is to be meaningful, it cannot be approached simplistically. (It was said of the legendary coach Vince Lomardi that he was always fair because he treated all his players the same -- like dogs!) For schools and teachers to be equitable, fair, and just involves designing instruction in ways that accounts for a wide range of individual differences and circumstances.

Good teachers are always learners. They are keenly interested in what others have found works well. This leads most teachers to be rather eclectic in their daily practice.

Because there is so much to learn about effectively teaching students who manifest learning, behavior, and/or emotional problems, eclecticism can be a healthy alternative to fads, fancies, and dogmaticism. But care must be taken to avoid naive forms of eclecticism. Naive eclecticism is the tendency to grab hold of almost every new idea one learns about. (If it looks appealing, it is adopted – regardless of whether it is valid or consistent with other practices the teacher is using.)

No one should use a casual and undiscriminating approach to teaching. And, no one should think there is a "magic bullet" that will solve the many dilemmas a teacher encounters every day.

The way to avoid naive eclecticism is to build one's approach to teaching on a coherent set of

- underlying concepts
- a set of practice guidelines that reflect these concepts
- best practices that are consistent with the guidelines.

These considerations guide the following discussion which focuses on "classroom-focused enabling" as a critical aspect of efforts to assure that all students have an equal opportunity to succeed at school.

In many schools, when students are not doing well, the trend is to refer them directly for assessment in hopes of referral for special help – perhaps even assignment to special education. In some schools and classrooms, the number of referrals is dramatic. Where special teams exist to review students for whom teachers request help, the list grows as the year proceeds. The longer the list, the longer the lag time for review – often to the point that, by the end of the school year, the team has reviewed just a small percentage of those referred. And, no matter how many are reviewed, there are always more referrals than can be served.

One solution might be to convince policy makers to fund more remediation and related services at schools. However, even if the policy climate favored more special programs, such interventions alone are not a comprehensive approach for addressing barriers to learning. More services to treat problems certainly are needed. But so are prevention and early-after-onset programs that can reduce the number of students teachers send to review teams.

> No one is certain of the exact number of students who require assistance in dealing with factors that interfere with classroom learning. There is consensus, however, that significant barriers are encountered by many, especially those from poor families. Because of societal inequities, teachers in large urban and poor rural schools usually tell us that over 50% of their students are manifesting learning, behavior, and emotional problems. In public schools serving more affluent families, the proportion of students experiencing such problems is smaller, but it is a rare school that does not have more problems than it can handle effectively. (Findings from the National Assessment of Education Progress indicate that 40 percent of nine-year-olds in the U.S. are reported as scoring poorly.)

As discussed in Module I, schools committed to the success of all children must be redesigned to *enable learning* by addressing barriers to learning. A key element of an enabling component involves building the capacity of classrooms to enhance instructional effectiveness. We call this classroom-focused enabling. A key facet of classroom-focused enabling is personalized instruction that accounts for motivational and developmental differences.

Based on our analyses of the "best practice" literature, we have designed this module to address the following topics, which are key to preventing problems and maximizing learning in the classroom:

Unit A: What is Good Teaching?
- 1) Principles, Guidelines, and Characteristics of Good Schools and Good Teaching
- 2) Underlying Assumptions and Major Program Elements of a Personalized Program
- 3) A Collaborative and Caring Classroom: Opening the Classroom Door
  - a) Opening the Door to Enhance Teacher Learning
  - b) Opening the Door to Assistance and Partnerships
  - c) Creating a Caring Context for Learning

A Few Related References

Unit B: Engaging Students (and their Families) in Learning: Real and Valued Options and Decision Making
- 1) About Motivation
  - a) Motivation and Learning
  - b) Two Key Components of Motivation: Valuing and Expectations
  - c) Overreliance on Extrinsics: A Bad Match
- 2) Options
- 3) Learner Decision Making
- 4) Research on Preferences, Choice, Control, and Student Engagement

A Few Related References

Unit C: General Strategies for Facilitating Motivated Performance and Practice
- 1) Creating a Stimulating and Manageable Learning Environment
  - a) Designing the Classroom for Active Learning
  - b) Grouping Students and Turning Big Classes into Smaller Units
- 2) Providing Personalized Structure for Learning
- 3) Instructional Techniques
  - a) Using Techniques to Enhance Motivation
  - b) Using Techniques to Support and Guide Performance and Learning
- 4) Turning Homework into Motivated Practice
- 5) Assessing Student Learning to Plan Instruction and Providing Nurturing Feedback
  - a) Planning Instruction
  - b) Providing Nurturing Feedback
- 6) Conferencing as a Key Process
- 7) Volunteers as an Invaluable Resource

A Few Related References

(cont.)

Unit D: Special Classroom Assistance to Engage, Guide, and Support Those Students Who Need More

1) Levels of Special Assistance
2) Level A – Special Assistance in the Classroom to Engage and Accommodate Students in Age Appropriate Life Tasks
    a) Adding Learning Options and Individual Accommodations
    b) About Addressing Behavior Problems
3) Level B – Special Assistance in the Classroom to Develop Prerequisites
4) Level C – Special Assistance in the Classroom to Address Factors Interfering with Learning
    a) Classroom Instruction at Level C
    b) A Note About Inclusion
5) Sequencing Special Assistance
6) Referral When Necessary

A Few Related References

Unit E: Capitalizing on Technology

1) Technology in the Classroom – A Big Picture Overview
2) Applications and Benefits of Technology in the Classroom
    a) Uses and Benefits
    d) Caveats and Cautions
3) Supporting Special Assistance
4) Access to and By the Home
5) Some Websites for Classroom Resources and a Few References on Using Technology

Unit A

Objectives

The intent in this Unit is to help you learn more about:

(1) *principles, guidelines, and characteristics of good schools and good teaching* (After going over the material, be sure you can identify at least three principles or characteristics of good teaching.)

(2) *underlying assumptions and major program elements of a personalized program* (After going over the material, be sure you can identify three program elements.)

(3) *what is involved in "opening up the classroom door"* (After going over the material, be sure you can discuss two basic features involved in creating a collaborative and caring classroom).

Kids need us most,
when they're at their worst.

Unit A: What is Good Teaching?

We believe the strength in education resides in the intelligent use of [the] powerful variety of approaches – matching them to different goals and adapting them to the student's styles and characteristics. Competence in teaching stems from the capacity to reach out to different children and to create a rich and multidimensional environment for them. Curriculum planners need to design learning centers and curricula that offer children a variety of educational alternatives . . . . The existing models of teaching are one basis for the repertoire of alternative approaches that teachers, curriculum makers, and designers of materials can use to help diverse learners reach a variety of goals . . . . We believe the world of education should be a pluralistic one – that children and adults alike should have a "cafeteria of alternatives" to stimulate their growth and nurture both their unique potential and their capacity to make common cause in the rejuvenation of our troubled society.

Bruce Joyce & Marsha Weil

Most public school curriculum guides and manuals reflect efforts to prepare youngsters to cope with what may be called *developmental* or *life tasks*. Reading, math, biology, chemistry, social studies, history, government, physical education, sex education – all are seen as preparing an individual to take an appropriate role in society as a worker, citizen, community member, and parent.

Most teachers, however, also want to foster individual well-being, talents, and personal integrity.

Thus, good teaching is not simply a matter of conveying content and mastering instructional techniques. Underlying any discussion of *What is good teaching?* is a *rationale* regarding what constitutes the right balance between societal and individual interests.

The rationale we have adopted here is that good teaching in the context of society's institutions for educating the young requires adoption of a coherent approach to accomplishing society's intentions in ways that promote the well-being of youngsters. On top of this, good teaching requires the ability to execute such a balancing act while achieving explicit outcomes related to both societal and individual goals.

Because of the importance of the rationale adopted by teachers, we begin this module with a quick summary of principles, guidelines, and characteristics that have been synthesized over the years. They warrant more discussion, but we must leave that to you.

The main focus in this module is on processes for effective instruction and creating a caring environment – which are essential facets of good teaching. From this perspective, we can begin with the old adage:

Good teaching meets learners where they are.

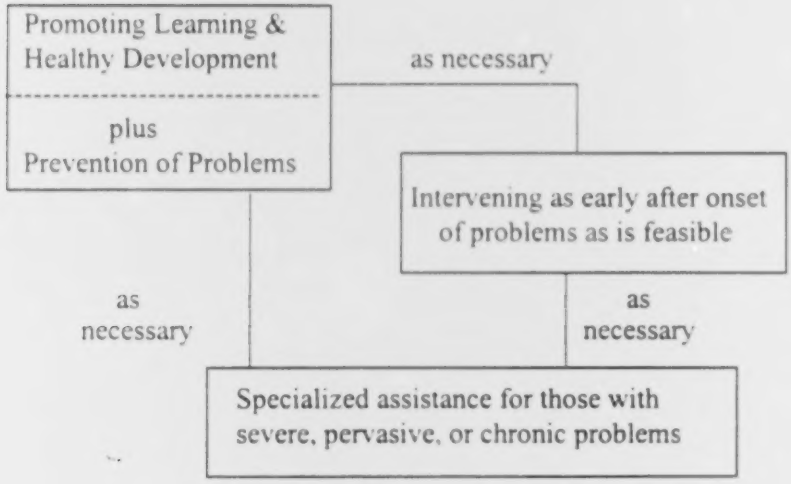
In practice, this adage usually is interpreted as a call for *matching* a student's current *capabilities* (e.g., knowledge and skills). However, matching *motivation* also is essential. Such a motivational emphasis encompasses concerns about *intrinsic* motivation and overcoming *avoidance* motivation.

It is clear that the emphasis on matching capabilities is the prevalent orientation in the literature on teaching. Motivational considerations often are given short shrift. The irony, of course, is that most teachers recognize that motivational factors often play a key role in accounting for poor instructional outcomes. One of the most common laments among teachers is: "They could do it, if only they *wanted* to!" Teachers also know that good abilities are more likely to emerge when students are motivated not only to pursue class assignments, but also are interested in using what they learn in other contexts.

Our intent here is to outline an orientation to teaching that (a) stresses the necessity of matching both motivation and capabilities and (b) practices that encompass both regular instruction and specialized assistance (see the Figure below). The ideas presented in this module reflect both an appreciation that learning and teaching are dynamic and nonlinear processes and that some learners experience problems that require use of something more than the best personalized instruction offers. The discussion also reflects an appreciation for the importance of a caring context.

Finally, it is recognized that teaching and enabling learning are not the teacher's responsibility alone. Good teaching requires collaboration among teachers and other staff at the school and is fostered or hindered by what takes place outside the school. These are matters covered in Modules I and III.

Building Assets & Addressing Barriers to Learning and Development


Promoting Learning & Healthy Development
plus Prevention of Problems
as necessary
Intervening as early after onset of problems as is feasible
as necessary
as necessary
Specialized assistance for those with severe, pervasive, or chronic problems

1) Principles, Guidelines, and Characteristics of Good Schools and Good Teaching

Over many years of study, consensus is emerging about what constitutes effective schools and effective classrooms. On the following pages are a series of syntheses that encapsulate some of the best thinking about these matters. These probably will seem rather general and maybe a bit abstract and overwhelming on first reading. Take some time to reflect on them – perhaps a few at a time. Such reflection is an essential part of thinking out your philosophy about what schools should be about and your understanding of what good teaching is.

Obviously, some ideas require school-wide and even community-wide action; these represent objectives you will want to work with other stakeholders to achieve over time. We discuss your role related to such systemic changes in Module III. Other ideas represent classroom practices that you will learn more about in this module and, hopefully, through other inservice efforts at your school and on-the-job.

Stop, think, discuss

After reading and thinking a bit about the principles, guidelines, and characteristics on the following pages: If you haven't done so, you will find it helpful to form a study group to discuss the various points and their implications for daily practice.

(1) Find a good time and place for the group to meet.

(2) Clearly, you won't have time to discuss many of the items in detail, so:

a. begin the discussion with a brief exchange of what each member thinks are the most important guidelines and characteristics

b. discuss items anyone thinks should be deleted and/or added

c. choose a few items that the group wants to talk about in detail and spend about 10 minutes discussing each

Exhibit

Principles/Guidelines Underlying Good Instructional Practice

The following are widely advocated guidelines that provide a sense of the philosophy guiding efforts to address barriers to development and learning and promote healthy development.

Good instructional practice

- facilitates continuous cognitive, physical, emotional, and social development,
- is comprehensive, multifaceted, and integrated (e.g., extensive and intensive enough to ensure that students have the opportunity to develop fully),
- makes learning accessible to all students (including those at greatest risk and hardest-to-reach),
- ensures the same high quality for all,
- is user friendly, flexibly implemented, and responsive,
- is guided by a commitment to social justice (equity) and to creating a sense of community,
- uses the strengths and vital resources of all stakeholders to facilitate student learning and development,
- deals with students holistically and developmentally, as an individual and as part of a family, neighborhood, and community,
- is planned, implemented, evaluated, and evolved by highly competent, energetic, committed and responsible stakeholders,
- is tailored to fit distinctive needs and resources and to account for diversity,
- is tailored to use interventions that are no more intrusive than is necessary in meeting needs (e.g., the least restrictive environment),
- is staffed by stakeholders who have the time, training, skills and institutional and collegial support necessary to create an accepting environment and build relationships of mutual trust, respect, and equality,
- is staffed by stakeholders who believe in what they are doing,
- is staffed by stakeholders who pursue continuing education and self-renewal.

Exhibit

A Synthesis of Characteristics of Effective Schools and Classrooms that Account for *All* Learners*

Effective Schools

- Commitment to shared vision of equality
  >High expectations for student learning
  >Emphasis on academic work that is meaningful to the student

- Daily implementation of effective processes
  >Strong administrative leadership
  >Alignment of resources to reach goals
  >Professional development tied to goals
  >Discipline and school order
  >A sense of teamwork in the school
  >Teacher participation in decision making
  >Effective parental outreach and involvement

- Monitoring student progress through measured indicators of achievement
  >Setting local standards
  >Use of national standards
  >Use of data for continuous improvement of school climate and curricula

- Optimizing school size through limited enrollment, creation of small schools within big schools (e.g., academies, magnet programs), and other ways of grouping students and staff

- Strong involvement with the community and with surrounding family of schools
  >Students, families, and community are developed into a learning community
  >Programs address transitions between grades, school, school-to-career, and higher education

Effective Classrooms

- Positive classroom social climate that
  >personalizes contacts and supports
  >offers accommodation so all students have an equal opportunity to learn
  >adjusts class size and groupings to optimize learning
  >engages students through dialogue and decision making
  >incorporates parents in multiple ways
  >addresses social-emotional development

- Designing and implementing quality instructional experiences that
  >involve students in decision making
  >contextualize and make learning authentic, including use of real life situations and mentors
  >are appropriately cognitively complex and challenging
  >enhance language/literacy
  >foster joint student products
  >extend the time students engage in learning through designing motivated practice
  >ensure students learn how to learn and are prepared for lifelong learning
  >ensure use of prereferral intervention strategies
  >use advanced technology to enhance learning

- Instruction is modified to meet students' needs based on ongoing assessments using
  >measures of multiple dimensions of impact
  >students' input based on their self-evaluations

- Teachers collaborate and are supported with
  >personalized inservice, consultation, mentoring, grade level teaming
  >special resources who are available to come into the classroom to ensure students with special needs are accommodated appropriately

*Synthesized from a variety of sources, including *High Schools of the Millennium, American Youth* Policy Forum, 2000; *Assessing the Progress of New American Schools*, Rand, 1999; *Benchmarking Best Practices in Accountability Systems*, American Productivity and Quality Center, 2000; Elmore & Associates, 1990; Schlecty, 1990; Edmonds, 1979, 1981; Good & Brophy, 1986; Phi Delta Kappa, 1980; Purkey & Smith, 1983; Rutter, 1981; Brookover, Ready, Flood, Schweitzer & Wisenbaker, 1979; Purkey & Smith, 1985; Walberg, 1991; Witte & Walsh, 1990; Adelman and Taylor, 1993.

2) Underlying Assumptions and Major Program Elements of a Personalized Program

Underlying Assumptions. In Module I, we outlined the following basic assumptions that we see as underlying personalized programs.

- Learning is a function of the ongoing transactions between the learner and the learning environment (with all it encompasses).
- Optimal learning is a function of an optimal match between the learner's accumulated capacities and attitudes and current state of being and the program's processes and content.
- Matching both a learner's motivation and pattern of acquired capacities must be primary procedural objectives.
- The learner's perception is the critical criterion for evaluating whether a good match exists between the learner and the learning environment.
- The wider the range of options that can be offered and the more the learner is made aware of the options and has a choice about which to pursue, the greater the likelihood that he or she will perceive the match as a good one.
- Besides improved learning, personalized programs enhance intrinsic valuing of learning and a sense of personal responsibility for learning. Furthermore. such programs increase acceptance and even appreciation of individual differences, as well as independent and cooperative functioning and problem solving.

Program elements. As we delineate throughout this Module, the major elements of personalized programs include:

- regular use of informal and formal conferences for discussing options, making decisions, exploring learner perceptions, and mutually evaluating progress
- a broad range of options from which the learner can make choices with regard to learning content, activities, and desired outcomes
- a broad range of options from which the learner can make choices with regard to facilitation (support, guidance) of decision making and learning
- active decision making by the learner in making choices and in evaluating how well the chosen options match his or her current levels of motivation and capability
- establishment of program plans and mutual agreements about the ongoing relationships between the learner and the program personnel
- regular reevaluations of decisions, reformulation of plans, and renegotiation of agreements based on mutual evaluations of progress, problems, and current learner perceptions of the "match"

3) A Collaborative and Caring Classroom: Opening the Classroom Door

> *In some schools, it seems that teachers and students enter their classrooms ready to do battle. And at the end of the class, whoever is able to walk out "alive" is the winner.*

This, of course, is a gross exaggeration. . . . . Isn't it?

For a long time, teachers have gone into their classrooms and figuratively and often literally have shut their doors behind them. As a result, for better and worse, they have been on their own. On the positive side, the closed door limits outside meddling and inappropriate monitoring. The downside is that, in too many instances, teachers are deprived of opportunities to learn from colleagues and too often the isolation from others leads to feelings of alienation and "burn out." Moreover, students are cut off from a variety of resources and experiences that appear essential to ensuring that all students have an equal opportunity to learn.

Because the negatives outweigh the potential gains, there are increasing calls for "opening the classroom door" to enhance collegial collaboration, consultation, mentoring, and greater involvement of expert assistance, volunteers, family members, and the community-at-large. Such fundamental changes in the culture of schools and classrooms are seen as routes to enhancing a caring climate, a sense of community, and teaching effectiveness. These changes are especially important for *preventing* commonplace learning, behavior, and emotional problems and for responding *early-after-onset* when a problem does arise.

Some of these matters were discussed briefly in Module I. The exhibit on the next page and the discussion on the pages following it offer some additional details to consider.

Exhibit

What's involved in working together?

Collaboration and collegiality

As Hargreaves and others have noted, these concepts are fundamental to improving morale and work satisfaction and to the whole enterprise of transforming schools to meet the needs of individuals and society. *Collaborative cultures* foster collaborative working relationships which are spontaneous, voluntary, development-oriented, pervasive across time and space, and unpredictable. When collegiality is *mandated*, it often produces what has been called *contrived collegiality* which tends to breed inflexibility and inefficiency. Contrived collegiality is administratively regulated, compulsory, implementation-oriented, fixed in time and space, and predictable.

Teacher collaboration and teaming

Increasingly it is becoming evident that teachers need to work closely with other teachers and school personnel as well as with parents, professionals-in-training, volunteers, and so forth. Collaboration and teaming are key facets of addressing barriers to learning. They allow teachers to broaden the resources and strategies available in and out of the classroom to enhance learning and performance.

Welcoming for new staff and ongoing social support for all staff

Just as with students and their families, there is a need for those working together at a school to feel they are truly welcome and have a range of social supports. Thus, a major focus for stakeholder development activity is establishment of a program that welcomes and connects new staff with others with whom they will be working and does so in ways that effectively incorporates them into the community.

Barriers to working together

Problems related to working relationships are a given. To minimize such problems, it is important for participants to understand barriers to working relationships and for sites to establish effective problem solving mechanisms to eliminate or at least minimize such barriers.

Rescue dynamics

A special problem that arises in caring communities are rescue dynamics. Such dynamics arise when caring and helping go astray, when those helping become frustrated and angry because those being helped don't respond in desired ways or seem not to be trying. It is important to minimize such dynamics by establishing procedures that build on motivational readiness and personalized interventions.

a) Opening the Door to Enhance Teacher Learning

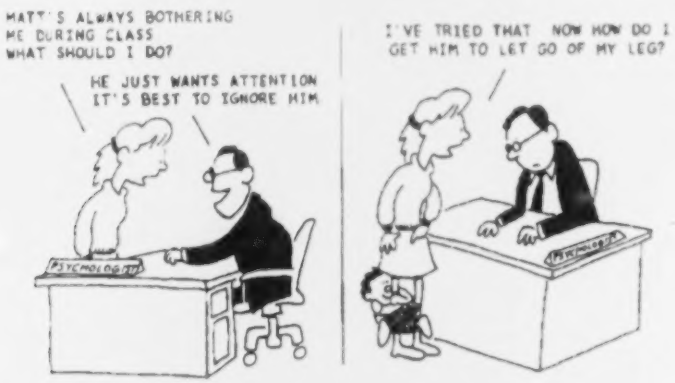
New teachers need as much on-the-job training as can be provided.

All teachers need to learn more about classroom-focused enabling.

In opening the classroom door to enhance teacher learning, the crux of the matter is to ensure that effective mentoring and collegial practices are used. Learning effectively from colleagues is not just a talking game. It involves opportunities for mentors and colleagues to model and guide change (e.g., demonstrate and discuss new approaches, guide initial practice and eventual implementation, and follow-up to improve and refine). Preferably, the modeling would take place in a teacher's own classroom. However, if the school can arrange it, the process also can be carried out in colleagues' classrooms. Also, videotapes of good practices in colleagues classrooms can be used in a variety of ways to enrich collegial sharing.

One type of arrangement that can facilitate shared learning is team teaching with a mentor or a colleague. (Team teaching is covered in Unit C.)

Another arrangement is for the school to use its specialist personnel (e.g., school psychologists, counselors, special education resource teachers) in providing mentoring and demonstrations rather than as "consultants." That is, rather than telling teachers what they might do to address student learning, behavior, and emotional problems, specialists should be trained to go into classrooms to model and then guide teachers as they begin to practice and implement what they are learning.


MATT'S ALWAYS BOTHERING ME DURING CLASS WHAT SHOULD I DO?
HE JUST WANTS ATTENTION IT'S BEST TO IGNORE HIM
I'VE TRIED THAT NOW HOW DO I GET HIM TO LET GO OF MY LEG?

b) Opening the Door to Assistance and Partnerships

> As Hargreaves cogently notes, the way to relieve the uncertainty and open-endedness that characterizes classroom teaching is to create communities of colleagues who work collaboratively [in cultures of shared learning and positive risk-taking] to set their own professional limits and standards, while still remaining committed to continuous improvement. Such communities can also bring together the professional and personal lives of teachers in a way that supports growth and allows problems to be discussed without fear of disapproval or punishment.

Besides enhancing teacher learning, opening the classroom door allows for the addition of a variety of forms of assistance and useful partnerships.

Increasingly, it is becoming evident that teachers need to work closely with other teachers and school personnel, as well as with parents, professionals-in-training, volunteers, and so forth. Collaboration and teaming are key facets of addressing barriers to learning. They allow teachers to broaden the resources and strategies available in and out of the classroom to enhance learning and performance.

Student learning is neither limited to what is formally taught nor to time spent in classrooms. It occurs whenever and wherever the learner interacts with the surrounding environment. All facets of the community (not just the school) provide learning opportunities. Anyone in the community who wants to facilitate learning might be a contributing teacher. This includes aides, volunteers, parents, siblings, peers, mentors in the community, librarians, recreation staff, etc. They all constitute what can be called the teaching community. When a classroom successfully joins with its surrounding community, everyone has the opportunity to learn and to teach. Indeed, most schools do their job better when they are an integral and positive part of the community. The array of people who might be of assistance are:

- Aides and a variety of volunteers
- Other regular classroom teachers
- Family members
- Students
- Specialist teachers and support service personnel
- School administrators
- Classified staff
- Teachers-in-training and other professionals-in-training

A few examples are highlighted in the Exhibit on the next page; others will be stressed in the remaining units of this module.

Exhibit
Examples of Opening the Door to Assistance and Partnerships

Using Aides and Volunteers in Targeted Ways

Chronically, teachers find classroom instruction disrupted by some student who is less interested in the lesson than in interacting with a classmate. The first tendency usually is to use some simple form of social control to stop the disruptive behavior (e.g., using proximity and/or a mild verbal intervention). Because so many students today are not easily intimidated, teachers find such strategies do not solve the problem. So, the next steps escalate the event into a form of Greek tragedy. The teacher reprimands, warns, and finally sends the student to "time-out" or to the front office for discipline. In the process, the other students start to titter about what is happening and the lesson usually is disrupted.

In contrast to this scenario, you can train your aide (if you have one) or a volunteer who has the ability to interact with students to work in ways that target such youngsters. The training of such individuals focuses on what you want them to do when a problem arises and what they should be doing to prevent such problems. In reaction to a problem, the aide or volunteer should expect you to give a sign to go and sit next to the designated youngster. The focus is on re-engaging the student in the lesson. If this proves undoable, the next step involves taking the student for a walk outside the classroom. It is true that this means the student won't get the benefit of instruction during that period, but s/he wouldn't anyway.

Using this approach and not having to shift into a discipline mode has multiple benefits. For one, you are able to carry out your lesson plan. For another, the other students do not have the experience of seeing you having a control contest with a student. (Even if you win such contests, it may have a negative effect on how students perceive you; and if you somehow "lose it," that definitely conveys a wrong message. Either outcome can be counterproductive with respect to a caring climate and a sense of community.) Finally, you have not had a negative encounter with the targeted student. Such encounters build up negative attitudes on both sides which can be counterproductive with respect to future teaching, learning, and behavior. Because there has been no negative encounter, you can reach out to the student after the lesson is over and start to think about how you can use your aide or volunteers to work with the student to prevent future problems.

Team Teaching

The obvious point here is that partnering with a compatible colleague enables the two of you to complement each others' areas of competence, provide each other with nurturance and personal support, and allow for relief in addressing problems. (See Unit C)

Collaborating with Special Educators and other Specialists

Almost every school has some personnel who have special training relevant to redesigning the classroom to work for a wider range of students. These specialists range from those who teach music or art to those who work with students designated as in need of special education. They can bring to the classroom not only their special expertise, but ideas for how the classroom design can incorporate practices that will engage students who have not been doing well and can accommodate those with special needs.

c) Creating a Caring Context for Learning

As suggested in Module I, from a psychological perspective, it is important that teachers establish a classroom atmosphere that encourages mutual support and caring and creates a sense of community. Such an atmosphere can play a key role in preventing learning, behavior, emotional, and health problems. Learning and teaching are experienced most positively when the learner cares about learning and the teacher cares about teaching.

> *Moreover, the whole process benefits greatly when all the participants care about each other.*

Caring has moral, social, and personal facets. And when all facets of caring are present and balanced, they can nurture individuals and facilitate the process of learning. At the same time, caring in all its dimensions should be a major focus of what is taught and learned. That is, the classroom curriculum should encompass a focus on fostering socio-emotional and physical development.

Caring begins when students (and their families) first arrive at a school. Classrooms and schools can do their job better if students feel they are truly welcome and have a range of social supports. A key facet of welcoming encompasses effectively connecting new students with peers and adults who can provide social support and advocacy.

On an ongoing basis, caring is best maintained through use of personalized instruction, regular student conferences, activity fostering social and emotional development, and opportunities for students to attain positive status. Efforts to create a caring classroom climate benefit from programs for cooperative learning, peer tutoring, mentoring, advocacy, peer counseling and mediation, human relations, and conflict resolution. Clearly, a myriad of strategies can contribute to students feeling positively connected to the classroom and school.

Given the importance of home involvement in schooling, attention also must be paid to creating a caring atmosphere for family members. Increased home involvement is more likely if families feel welcome and have access to social support at school. Thus, teachers and other school staff need to establish a program that effectively welcomes and connects families with school staff and other families to generate ongoing social support and greater participation in home involvement efforts.

Also, just as with students and their families, school staff need to feel truly welcome and socially supported. Rather than leaving this to chance, a caring school develops and institutionalizes a program to welcome and connect new staff with those with whom they will be working. And it does so in ways that effectively incorporates newcomers into the organization.

A new girl came to my class I said hello to her with a smile. I became friends with her saying hello and eating lunch with her. I played games with her and we played at recess and lunch I also played with her at P.E and after school.

Exhibit

A Caring Context for Learning

Learning community

Learning is neither limited to what is formally taught nor to time spent in classrooms. It occurs whenever and wherever the learner interacts with the surrounding environment. All facets of the community (including the school) provide learning opportunities -- thus the term learning community.

Teaching

Whenever a surrounding environment tries to facilitate learning, the process can be called teaching. Teaching occurs at school, at home, and in the community at large. It may be formalized or informally transmitted. Teaching happens most positively when the learner wants to learn something and the surrounding environment wants to help the learner do so. That is, positive learning is facilitated when the learner *cares* about learning and the teacher *cares* about teaching. The whole process undoubtedly benefits greatly when all the participants *care* about each other.

Caring has moral, social, and personal facets

All facets need to be addressed. When all facets of caring are present and balanced, they can nurture individuals and facilitate the process of learning. At the same time, caring in all its dimensions should be a major focus of what is taught and learned.

Teachers are all who want to facilitate learning

This includes professional teachers, aides, volunteers, parents, siblings, peers, mentors in the community, librarians, recreation staff, etc. They all constitute what can be called *the teaching community*.

Everyone is a learner and may be teachers

In the learning/teaching community, all are learners and probably play some role as teachers.

Teaching benefits from organizational learning

Organizational learning requires an organizational structure "'where people continually expand their capabilities to understand complexity, clarify vision and improve shared mental models' [Senge, 1990] by engaging in different tasks, acquiring different kinds of expertise, experiencing and expressing different forms of leadership, confronting uncomfortable organizational truths, and searching together for shared solutions" (Hargreaves, 1994).

Communities of colleagues

In schools, as Hargreaves has stressed, the way to relieve "the uncertainty and open-endedness in teaching" is to create "communities of colleagues who work collaboratively [in cultures of shared learning and positive risk-taking] to set their own professional standards and limits, while still remaining committed to continuous improvement. Such communities can also bring together the professional and personal lives of teachers in a way that supports growth and allows problems to be discussed without fear of disapproval or punishment."

Stop, think, discuss

Now that you've covered Unit A, what's your answer to the question:

What is Good Teaching?

(1) Make a brief outline of what you see as the most important points.

(2) Discuss them with your study group or other friends and colleagues.

(3) After the discussion, decide how you might revise your outline.

If you want to read more about the idea of a collaborative classroom and creating a climate for diversity, see two brief readings that have been in included in the accompanying materials.

A Few Related References*

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Banks, J.A. *An Introduction to Multicultural Education.* Boston: Allyn and Bacon, 1994.

Chaskin, R.J. & Rauner, D.M. (eds.) Youth and caring. A special section of the May 1995 issue of the *Phi Delta Kappan.*

Deci, E.L. & Ryan, R.M. (1985). *Intrinsic motivation and self determination in human behavior.* New York: Plenum Press.

Desforges, C., Ed. (1995). *An Introduction to Teaching: Psychological Perspectives.* Oxford: Blackwell.

Educational Commission of the States (2000). *Environment as an Integrating Context for Learning (EIC).* http://www.ecs.org

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age.* New York: Teachers College Press.

Inger, M. (1993). Teacher Collaboration in Urban Secondary Schools. *ERIC Clearinghouse on Urban Education.*

Joyce, B., & Weil, M. (1996). *Models of teaching.* 5th ed. Boston: Allyn & Bacon.

Sapon-Shevin, Mara. (1996). Celebrating diversity, creating community: Curriculum that honors and builds on differences. In S. B. Stainback, & W.C. Stainback (Eds.), *Inclusion: A guide for educators.*. Paul H. Brookes Publishing Co: Baltimore, MD.

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

Unit B

Objectives

The intent in this Unit is to help you learn more about:

(1) *two key components of motivation and their implications for teaching* (After going over the material, be sure you can state why overeliance on extrinsic reinforcement is not a good approach to instruction.)

(2) *the motivational implications of instructional options and student decision making* (After going over the material, be sure you can discuss at least one positive outcome of enabling students to make decisions about their classroom program and at least one negative outcome of not doing so.)

Outline for Unit B

1) About Motivation
   a) Motivation and Learning
   b) Two Key Components of Motivation: Valuing and Expectations
   c) Overreliance on Extrinsics: A Bad Match
2) Options
3) Learner Decision Making
4) Research on Preferences, Choice, Control, and Student Engagement

A Few Related References

I find the great thing in this world
is not so much where we stand,
as in which direction we are moving.
Oliver W. Holmes

Unit B

Engaging Students (and their Families) in Learning: Real and Valued Options and Decision Making

Once upon a time, the animals decided that their lives and their society would be improved by setting up a school. The basics identified as necessary for survival in the animal world were swimming, running, climbing, jumping, and flying. Instructors were hired to teach these activities, and it was agreed that all the animals would take all the courses. This worked out well for the administrators, but it caused some problems for the students.

> The squirrel, for example, was an A student in running, jumping, and climbing but had trouble in flying class, not because of an inability to fly, for she could sail from the top of one tree to another with ease, but because the flying curriculum called for taking off from the ground. The squirrel was drilled in ground-to-air take-offs until she was exhausted and developed charley horses from overexertion. This caused her to perform poorly in her other classes, and her grades dropped to D's.

The duck was outstanding in swimming class -- even better than the teacher. But she did so poorly in running that she was transferred to a remedial class. There she practiced running until her webbed feet were so badly damaged that she was only an average swimmer. But since average was acceptable, nobody saw this as a problem -- except the duck.

> In contrast, the rabbit was excellent in running, but, being terrified of water, he was an extremely poor swimmer. Despite a lot of makeup work in swimming class, he never could stay afloat. He soon became frustrated and uncooperative and was eventually expelled because of behavior problems.

The eagle naturally enough was a brilliant student in flying class and even did well in running and jumping. He had to be severely disciplined in climbing class, however, because he insisted that his way of getting to the top of the tree was faster and easier.

> It should be noted that the parents of the groundhog pulled him out of school because the administration would not add classes in digging and burrowing. The groundhogs, along with the gophers and badgers, got a prairie dog to start a private school. They all have become strong opponents of school taxes and proponents of voucher systems.

By graduation time, the student with the best grades in the animal school was a compulsive ostrich who could run superbly and also could swim, fly, and climb a little. She, of course, was made class valedictorian and received scholarship offers from all the best universities.

(George H. Reeves with giving this parable to American educators.)

I suspect that many children would learn arithmetic,
and learn it better, if it were illegal.
John Holt

Curriculum content is learned as a result of transactions between the learner and environment. The essence of the teaching process is that of creating an environment that first can mobilize the learner to pursue the curriculum and then can maintain that mobilization, while effectively facilitating learning.

Of course, no teacher has control over all the important elements involved in learning. Indeed, teachers actually can affect only a relatively small segment of the physical environment and social context in which learning is to occur. Because this is so, it is essential that teachers begin with an appreciation of what is likely to affect a student's positive and negative motivation to learn. For example, they should pay particular attention to the following points:

- Optimal performance and learning require motivational readiness. Readiness should not be viewed in the old sense of waiting until an individual is interested. Rather, it should be understood in the contemporary sense of establishing environments that are perceived by students as caring, supportive places and offering stimulating activities that are perceived as vivid (and at times novel), challenging, valued, and doable.

- Teachers must not only try to increase motivation -- especially intrinsic motivation -- but must also avoid practices that decrease motivation. For example, they must be careful not to overrely on extrinsics to entice and reward because to do so may decrease intrinsic motivation.

- Motivation represents both a process and an outcome concern. For example, the program must be designed to maintain, enhance, and expand intrinsic motivation for pursuing current learning activities and learning beyond the lesson.

- Increasing intrinsic motivation involves affecting a student's thoughts, feelings, and decisions. In general, the intent is to use procedures that have the potential to reduce negative and increase positive feelings, thoughts, and coping strategies with respect to learning. With specific respect to learning and behavior problems, this means especially identifying and minimizing experiences that maintain or may increase avoidance motivation.

The point about minimizing experiences that maintain or may increase avoidance motivation deserves special emphasis. Students who manifest learning, behavior, and/or emotional problems may have developed extremely negative perceptions of teachers and programs. In such cases, they are not likely to be open to people and activities that look like "the same old thing." Major changes in approach are required if the student is even to perceive that something has changed in the situation. Minimally, exceptional efforts must be made to have these students (1) view the teacher as supportive (rather than controlling and indifferent) and (2) perceive content, outcomes, and activity options as personally valuable and obtainable.

In marked contrast to students who have developed negative attitudes, those who are intrinsically motivated tend to seek out challenges related to classroom learning and do more than what is required. In doing so, they tend to learn more and learn more deeply than do classmates who are extrinsically motivated.

Outline for this Unit

1) About Motivation
   a) Motivation and Learning
   b) Two Key Components of Motivation: Valuing and Expectations
   c) Overreliance on Extrinsics: A Bad Match
2) Options
3) Learner Decision Making
4) Research on Preferences, Choice, Control, and Student Engagement

Stop, think, discuss

Observe a group of students who are involved in the same classroom activity. Identify one who appears highly engaged in learning and one who seems very bored. After observing for a while, write down your views about why each of the students is responding so differently to the same activity.

1) About Motivation

> *External reinforcement may indeed get a particular act going and may lead to its repetition, but it does not nourish, reliably, the long course of learning by which [one] slowly builds in [one's] own way a serviceable model of what the world is and what it can be.*
>
> Jerome Bruner

Maria doesn't want to work on improving her reading. Not only is her *motivational readiness* for learning in this area low, but she also has a fairly high level of *avoidance motivation* for reading.

> In contrast, David is motivationally ready to improve reading skills, but he has very little motivation to do so in the ways his teacher proposes. He has high motivation for the *outcome* but low motivation for the *processes* prescribed for getting there.

Matt often gets very motivated to do whatever is prescribed to help him learn to read better, but his motivation starts to disappear after a few weeks of hard work. He has trouble maintaining a sufficient amount of ongoing or *continuing motivation*.

> Helena appeared motivated to learn and did learn many new vocabulary words and improved her reading comprehension on several occasions over the years she was in special school programs. Her motivation to read after school, however, has never increased. It was assumed that as her skills improved, her attitude toward reading would too. But it never has.

No one expected James to become a good reader because of low scores on tests related to phonics ability and reading comprehension in 2nd grade. However, his teacher found some beginning level books on his favorite sport (baseball) and found that he really wanted to read them. He asked her and other students to help him with words and took the books home to read (where he also asked an older sister for some help). His skills started to improve rapidly and he was soon reading on a par with his peers.

As noted in the report on *High Schools of the Millenium*:

> Many students say that high schools are not working. They feel their classes are irrelevant and boring, that they are just passing time until they can graduate to do something meaningful, such as go to work or college. . . .
>
> Many students also are not able to connect what they are being taught with what they feel they need for success in their later life. This disengagement from the learning process is manifested in many ways, one of which is the lack of student responsibility for learning. In many ways the traditional educational structure, one in which teachers "pour knowledge into the vessel" (the student), has placed all responsibility for learning on the teacher, none on the student. Schools present lessons neatly packaged, without acknowledging or accepting the "messiness" of learning-by-doing and through experience and activity. Schools often do not provide students a chance to accept responsibility for learning, as that might actually empower students. Students in many schools have become accustomed to being spoon-fed the material to master tests, and they have lost their enthusiasm for exploration, dialogue, and reflection -- all critical steps in the learning process.

a) Motivation and Learning

What the preceding examples show is that

- motivation is a prerequisite to learning, and its absence may be a cause of learning problems, a factor maintaining such problems, or both

- individuals may be motivated toward the idea of obtaining a certain learning outcome but may not be motivated to pursue certain learning processes

- individuals may be motivated to start to work on overcoming their learning problem but may not maintain their motivation

- individuals may be motivated to learn basic skills but maintain negative attitudes about the area of functioning and thus never use the skills except when they must

- motivated learners can do more than others might expect

Obviously, motivation must be considered in matching a learner with a learning environment. What's required is

- developing a high level of motivational readiness for overcoming the learning problem (including reduction of avoidance motivation) -- so the learner is mobilized

- establishing processes that elicit, enhance, and maintain motivation for overcoming the problem -- so the learner stays mobilized

- enhancing motivation as an outcome so that the desire to pursue a particular area, such as reading, increasingly becomes a positive intrinsic attitude that mobilizes learning outside the teaching situation

An increased understanding of motivation clarifies how essential it is to avoid processes that make students feel controlled and coerced, that limit the range of options with regard to materials, and that limit the focus to a day-in, day-out emphasis on the problem to be remedied. From a motivational perspective, such processes are seen as likely to produce avoidance reactions among students and thus reduce opportunities for positive learning and for development of positive attitudes.

b) Two Key Components of Motivation: Valuing and Expectations

Two common reasons people give for not bothering to learn something are "It's not worth it" and "I know I won't be able to do it." In general, the amount of time and energy spent on an activity seems dependent on how much the activity is valued by the person and on the person's expectation that what is valued will be attained without too much cost.

About Valuing. What makes something worth doing? Prizes? Money? Merit awards? Praise?

Certainly!

We all do a great many things, some of which we don't even like to do, because the activity leads to a desired reward. Similarly, we often do things to escape punishment or other negative consequences that we prefer to avoid.

Rewards and punishments may be material or social. For those with learning problems, there has been widespread use of such "incentives." Rewards often have taken the form of systematically giving points or tokens that can be exchanged for candy, prizes, praise, free time, or social interactions. Punishments have included loss of free time and other privileges, added work, fines, isolation, censure, and suspension. Grades have been used both as rewards and punishments.

Because people will do things to obtain rewards or avoid punishment, rewards and punishment often are called *reinforcers*. Because they generally come from sources outside the person, they often are called *extrinsics*.

Extrinsic reinforcers are easy to use and can have some powerful immediate effects on behavior. Therefore, they have been widely adopted in the fields of special education and psychology. Unfortunately, the immediate effects are usually limited to very specific behaviors and often are short-term. Moreover, as discussed in the next section, extensive use of extrinsics seems to have some undesired effects. And sometimes the available extrinsics simply aren't powerful enough to get the desired results.

Although the source of extrinsic reinforcers is outside the person, the meaning or value attached to them comes from inside. What makes some extrinsic factor rewarding to you is the fact that you experience it as a reward. And what makes it a highly valued reward is that you highly value it. If you don't like candy, there is not much point in our offering it to you as a reward.

Furthermore, because the use of extrinsics has limits, it's fortunate that we sometimes do things even without apparent extrinsic reason. In fact, a lot of what we learn and spend time doing is done for intrinsic reasons. Curiosity is a good example. Our curiosity leads us to learn a great deal. Curiosity seems to be an innate quality that leads all of us to seek stimulation and avoid boredom.

We also pursue some things because of what has been described as an innate striving for competence; people seem to value feeling competent. We try to conquer some challenges, and if none are around, we usually seek one out. Of course, if the challenges confronting us seem unconquerable or make us too uncomfortable (e.g., too anxious or exhausted), we try to put them aside and move on to something more promising.

Another important intrinsic motivator appears to be an internal push toward self-determination. People seem to value feeling and thinking that they have some degree of choice and freedom in deciding what to do.

And people seem to be intrinsically moved toward establishing and maintaining relationships with others. That is, people tend to value feelings of being inter-personally connected.

About Expectations. We may value something a great deal; but if we believe we can't do it or can't obtain it without paying too great a personal price, we are likely to look for other valued activities and outcomes to pursue. Expectations about these matters are influenced by previous experiences.

Areas where we have been unsuccessful are apt to be seen as unlikely paths to valued extrinsic rewards or intrinsic satisfactions. We may perceive past failure as the result of our lack of ability; or we may believe that more effort was required than we were willing to give. We may also feel that the help we needed to succeed was not available. If our perception is that very little has changed with regard to these factors, our expectation of succeeding at this time will be rather low.

Learning environments that provide a good match increase expectations of success by providing a learner with the support and guidance he or she wants and needs.

In general, then, what we value interacts with our expectations, and motivation is one product of this interaction.

Motivation theory captures the sense of this as follows:

$$E \times V$$

Can you decipher this? (Don't go on until you've tried.)

Hint: the "x" is a multiplication sign.

In case the equation stumped you, don't be surprised. The main introduction to motivational thinking that most teachers have been given in the past involves some form of reionforcement theory (which essentially deals with extrinsic motivation). Thus, all this may be new to you, even though motivational theorists have been wrestling with it for a long time, and intutively, you probably understand much of what they are talking about.

$$E \times V = M$$

The E deals with an individual's expectations about outcome (in school often this is about expectations of success or failure). The V deals with valuing, with valuing influenced by both intrinsic values and extrinsic reinforcers, albeit in a somewhat less than intutive way as we shall cover shortly. Thus, in general terms, motivation can be thought of in terms of expectancies times valuing.

Such theory recognizes that human beings are thinking and feeling organisms and that intrinsic factors can be powerful motivators. This understanding of human motivation has major implications for learning, teaching, and parenting.

Within some limits (which we need not discuss here), high expectations and high valuing produce high motivation, while low expectations (E) and high valuing (V) produce relatively weak motivation.

David greatly values the idea of improving his reading. He is unhappy with his limited skills and knows he would feel a lot better about himself if he could read. But, as far as he is concerned, everything his reading teacher asks him to do is a waste of time. He's done it all before, and he *still* has a reading problem. Sometimes he will do the exercises, but just to earn points to go on a field trip and to avoid the consequences of not cooperating. Often, however, he tries to get out of doing his work by distracting the teacher. After all, why should he do things he is certain won't help him read any better.

Expectancy	x	Valuing	=	Motivation
O	x	1.0	=	O

High expectations paired with low valuing also yield low approach motivation. Thus, the oft-cited remedial strategy of guaranteeing success by designing tasks to be very easy is not as simple a recipe as it sounds. Indeed, the approach is likely to fail if the outcome (e.g., improved reading, learning math fundamentals) is not valued or if the tasks are experienced as too boring or if doing them is seen as too embarrassing. In such cases, a strong negative value is attached to the activities, and this contributes to avoidance motivation.

Expectancy	x	Valuing	=	Motivation
1.O	x	0	=	O

Throughout this discussion of valuing and expectations, the emphasis has been on the fact that motivation is not something that can be determined solely by forces outside the individual. Others can plan activities and outcomes to influence motivation and learning; however, how the activities and outcomes are experienced determines whether they are pursued (or avoided) with a little or a lot of effort and ability. Appropriate appreciation of this fact is necessary in designing a match for optimal learning (see Exhibit on next page).

Exhibit

Is It Worth It?

In a small town, there were a few youngsters who were labeled as handicapped. Over the years, a local bully had taken it upon himself to persecute them. In one recent incident, he sent a gang of young ragamuffins to harass one of his classmates who had just been diagnosed as having learning disabilities. He told the youngsters that the boy was retarded, and they could have some fun calling him a "retard."

Day after day in the schoolyard the gang sought the boy out. "Retard! Retard!" they hooted at him.

The situation became serious. The boy took the matter so much to heart that he began to brood and spent sleepless nights over it. Finally, out of desperation, he told his teacher about the problem, and together they evolved a plan.

The following day, when the little ones came to jeer at him, he confronted them saying,

"From today on I'll give any of you who calls me a 'retard' a quarter."

Then he put his hand in his pocket and, indeed, gave each boy a quarter.

Well, delighted with their booty, the youngsters, of course, sought him out the following day and began to shrill, "Retard! Retard!"

The boy looked at them -- smiling. He put his hand in his pocket and gave each of them a dime, saying, "A quarter is too much -- I can only afford a dime today."

Well, the boys went away satisfied because, after all, a dime was money too.

However, when they came the next day to hoot, the boy gave them only a penny each.

"Why do we get only a penny today?" they yelled.

"That's all I can afford."

"But two days ago you gave us a quarter, and yesterday we got a dime. It's not fair!"

"Take it or leave it. That's all you're going to get."

"Do you think we're going to call you a 'retard' for one lousy penny?"

"So don't."

And they didn't.

(Adapted from a fable presented by Ausubel, 1948)

c) Overreliance on Extrinsics: A Bad Match

A growing appreciation of the importance of a learner's perceptions has led researchers to a very important set of findings about some undesired effects resulting from overreliance on extrinsics.

Would offering you a reward for learning this material make you more highly motivated? Maybe. But a reward might also reduce your motivation for pursuing the topic in the future. Why might this happen?

You might perceive the proposed reward as an effort to control your behavior. Or you may see it as an indication that the activity needs to be rewarded to make you want to do it. Such perceptions may start you thinking and feeling differently about what you have been doing. For example, you may start to resent the effort to control or bribe you. Or you may begin to think there must be something wrong with the activity if someone has to offer a reward for doing it. Also, later you may come to feel that the topic is not worth pursuing any longer because no reward is being offered.

Any of these thoughts and feelings may cause you to shift the intrinsic value you originally placed on learning about the topic. The point is that extrinsic rewards can undermine intrinsic reasons for doing things (see the Exhibit on the preceeding page). Although this may not always be a bad thing, it is an important consideration to think about in deciding to rely on extrinsic reinforcers (see Exhibit on the next page).

You might want to think about how grades affect your motivation. In the past:

> Have good grades tended to increase your motivation?
> Have poor grades increased or decreased your motivation?
> Did you feel you were working for a grade or to learn?
> If you ever took a course on a pass/fail basis, instead of for a grade, did it affect your motivation?

How would the offer of bonus pay for teachers who bring test scores up to some standard effect your motivation and that of colleagues?

Because of the prominent role they play in school programs, grading and other performance evaluations are a special concern in any discussion of the overreliance on extrinsics as a way to reinforce positive learning. Although grades often are discussed as simply providing information about how well a student is doing, many, if not most, students perceive each grade as a reward or a punishment. Certainly, many teachers use grades to try to control behavior -- to reward those who do assignments well and to punish those who don't. Sometimes parents add to a student's perception of grades as extrinsic reinforcers by giving a reward for good report cards.

Exhibit

Rewards -- To Control or Inform?

As Ed Deci has cogently stressed:

Rewards are generally used to control behavior. Children are sometimes rewarded with candy when they do what adults expect of them. Workers are rewarded with pay for doing what their supervisors want. People are rewarded with social approval or positive feedback for fitting into their social reference group. In all these situations, the aim of the reward is to control the person's behavior -- to make him continue to engage in acceptable behaviors. And rewards often do work quite effectively as controllers. Further, whether it works or not, each reward has a controlling aspect. Therefore, the first aspect to every reward (including feedback) is a controlling aspect.

However, rewards also provide information to the person about his effectiveness in various situations. When Eric received a bonus for outstanding performance on his job, the reward provided him with information that he was competent and self-determining in relation to his job. When David did well at school, his mother told him she was proud of him, and when Amanda learned to ride a bike, she was given a brand new two-wheeler. David and Amanda knew from the praise and bicycle that they were competent and self-determining in relation to school and bicycling. The second aspect of every reward is the information it provides a person about his competence and self-determination.

When the controlling aspect of the reward is very salient, such as in the case of money or the avoidance of punishment, [a] change in perceived locus of causality . . . will occur. The person is 'controlled' by the reward and s/he perceives that the locus of causality is external.

We all have our own horror stories about the negative impact of grades on ourselves and others. In general, grades have a way of reshaping what students do with their learning opportunities. In choosing what to study, students strongly consider what grades they are likely to receive. As deadlines for assignments and tests get closer, interest in the topic gives way to interest in maximizing one's grade. Discussion of interesting issues and problems related to the area of study gives way to questions about how long a paper should be and what will be on the test. None of this is surprising given that poor grades can result in having to repeat a course or being denied certain immediate and long-range opportunities. It is simply a good example of how systems that overemphasize extrinsics may have a serious negative impact on intrinsic motivation for learning.

And if the impact of current practices is harmful to those who are able learners, imagine the impact on students with learning and behavior problems!

The point for emphasis here is that learning involves matching motivation. Matching motivation requires an appreciation of the importance of a learner's perceptions in determining the right mix of intrinsic and extrinsic reasons for learning. It also requires understanding the key role played by expectations related to outcome.

When a good match is achieved, negative attitudes and behaviors tend to decrease. They are replaced by an expanding interest in learning, new feelings of competence and self-determination, and an increase in the amount of risk taken in efforts to learn.

Three major implications of the above are that a program must provide for

- a broad range of content, outcomes, and procedural options -- including a personalized structure to facilitate learning
- learner decision making
- ongoing information about learning and performance

Such procedures are seen as fundamental to mobilizing and maintaining learner motivation in classroom programs.

In the next section, we briefly explore the first two of these matters.

2) Options

If the only decision Maria can make is between reading book A, which she hates, and reading book B, which she loathes, she is more likely to be motivated to avoid making any decision than to be pleased with the opportunity to decide for herself. Even if she chooses one of the books over the other, the motivational effects the teacher wants are unlikely to occur. Thus:

Choices have to include valued and feasible options.

Maria clearly doesn't like to work on her reading problem at school in any way. In contrast, David wants to improve his reading, but he just doesn't like the programmed materials the teacher has planned for him to work on each day. James would rather read about science than the adventure stories his teacher has assigned. Matt will try anything if someone will sit and help him with the work. Thus:

Options usually are needed for (a) content and outcomes and (b) processes and structure.

Every teacher knows a classroom program has to have variety. There are important differences among students with regard to the topics and procedures that currently interest and bore them. And for students with learning, behavior, and/or emotional problems, more variety seems necessary.

As will be stressed in Unit D, a greater proportion of individuals with avoidance or low motivation for learning at school are found among those with learning, behavior, and/or emotional problems. For these individuals, few currently available options may be appealing. How much greater the range of options needs to be depends primarily on how strong avoidance tendencies are. In general, however, the initial strategies for working with such students involve

- further expansion of the range of options for learning (if necessary, this includes avoiding established curriculum content and processes)
- primarily emphasizing areas in which the student has made personal and active decisions
- accommodation of a wider range of behavior than usually is tolerated (e.g., a widening of limits on the amount and types of "differences" tolerated)

I KNOW YOU LIKE LUNCH-TIME BEST,
BUT THERE MUST BE SOMETHING ELSE
YOU'D LIKE TO DO AT SCHOOL!

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3) Learner Decision Making

From a motivational perspective, one of the most basic instructional concerns is the way in which students are involved in making decisions about options. Critically, decision-making processes can lead to perceptions of coercion and control or to perceptions of real choice (e.g., being in control of one's destiny, being self-determining). Such differences in perception can affect whether a student is mobilized to pursue or avoid planned learning activities and outcomes.

People who have the opportunity to make decisions among valued and feasible options tend to be committed to following through. In contrast, people who are not involved in decisions often have little commitment to what is decided. And if individuals disagree with a decision that affects them, besides not following through they may react with hostility.

Thus, essential to programs focusing on motivation are decision-making processes that affect perceptions of choice, value, and probable outcome. Optimally, the hope is to maximize perceptions of having a choice from among personally worthwhile options and attainable outcomes. At the very least, it is necessary to minimize perceptions of having no choice, little value, and probable failure.

Three special points should be noted about decision-making.

- Decisions are based on current perceptions. As perceptions shift, it is necessary to reevaluate decisions and modify them in ways that maintain a mobilized learner.

- Effective and efficient decision making is a basic skill, and one that is as fundamental as the three Rs. Thus, if an individual does not do it well initially, this is not a reason to move away from learner involvement in decision making. Rather, it is an assessment of a need and a reason to use the process not only for motivational purposes, but to improve this basic skill.

- Among students manifesting learning, behavior, and/or emotional problems, it is well to remember that the most fundamental decision some of these individuals have to make is whether they want to participate or not. That is why it may be necessary in specific cases temporarily to put aside established options and standards. Before some students will decide to participate in a proactive way, they have to perceive the learning environment as positively different -- and quite a bit so -- from the one in which they had so much failure.

4) Research on Preferences, Choice, Control, and Student Engagement

As noted earlier in this unit, student disengagement in classroom learning is widespread. Why is this the case?

In their book *Making it Happen: Student Involvement in Education Planning, Decision Making, and Instruction* (1998; Paul Brookes Publisher) Wehmeyer and Sands state:

> *Getting students involved in their education programs is more than having them participate; it is connecting students with their education, enabling them to influence and affect the program and, indeed, enabling them to become enwrapped and engrossed in their educational experiences.*

Reviews of the literature on human motivation stress that providing students with options and involving them in decision making is an effective way to enhance their engagement in learning and improve their learning and performance (e.g., see the Wehmeyer & Sands book, read the Exhibit on the following pages, and the readings related to this unit). For example, numerous studies have shown that opportunities to express preferences and make choices lead to greater motivation, academic gains, increases in productivity and on-task behavior, and decreases in aggressive behavior. Similarly, researchers report that student participation in goal setting leads to more positive outcomes (e.g., higher commitment to a goal and increased performance).

> *Simply put, people who have the opportunity to make decisions among valued and feasible options tend to be committed to following through.*

Conversely, studies indicate that student preferences and involvement tend to diminish when activities are chosen for them.

> *That is, people who are not involved in decisions often have little commitment to what is decided.*

Moreover, if individuals disagree with a decision that affects them, besides not following through they may react hostilely.

> *The implications for the classroom of all the research in this area seem evident: students who are given more say about what goes on related to their learning at school are likely to show higher degrees of engagement and academic success. Optimally, this means that ensuring decision-making processes maximize perceptions of having a choice from among personally worthwhile options and attainable outcomes. At the very least, it is necessary to minimize perceptions of having no choice, little value, and probable failure.*

Exhibit

Meaningful, Engaged Learning

(excerpted from article on NCREL: North Central Regional Educational Laboratory)

In recent years, researchers have formed a strong consensus on the importance of engaged learning in schools and classrooms. This consensus, together with a recognition of the changing needs of the 21st century, has stimulated the development of specific indicators of engaged learning. Jones, Valdez, Nowakowski, and Rasmussen (1994) developed the indicators described below . . . .

1. Vision of Engaged Learning

Successful, engaged learners are responsible for their own learning. These students are self-regulated and able to define their own learning goals and evaluate their own achievement. They are also energized by their learning, their joy of learning leads to a lifelong passion for solving problems, understanding, and taking the next step in their thinking . . . .

2. Tasks for Engaged Learning

In order to have engaged learning, tasks need to be challenging, authentic, and multidisciplinary. Such tasks are typically complex and involve sustained amounts of time. They are authentic in that they correspond to the tasks in the home and workplaces of today and tomorrow. Collaboration around authentic tasks often takes place with peers and mentors within school as well as with family members and others in the real world outside of school. These tasks often require integrated instruction that incorporates problem-based learning and curriculum by project.

3. Assessment of Engaged Learning

Assessment of engaged learning involves presenting students with an authentic task, project, or investigation, and then observing, interviewing, and examining their presentations and artifacts to assess what they actually know and can do. This assessment, often called performance-based assessment, is generative in that it involves students in generating their own performance criteria and playing a key role in the overall design, evaluation, and reporting of their assessment. The best performance-based assessment has a seamless connection to curriculum and instruction so that it is ongoing. Assessment should represent all meaningful aspects of performance and should have equitable standards that apply to all students.

4. Instructional Models & Strategies for Engaged Learning

The most powerful models of instruction are interactive. Instruction actively engages the learner, and is generative. Instruction encourages the learner to construct and produce knowledge in meaningful ways. Students teach others interactively and interact generatively with their teacher and peers . . . .

Meaningful, Engaged Learning *(cont.)*

5. Learning Context of Engaged Learning

For engaged learning to happen, the classroom must be conceived of as a knowledge-building learning community. Such communities not only develop shared understandings collaboratively but also create empathetic learning environments that value diversity and multiple perspectives. These communities search for strategies to build on the strengths of all of its members . . .

6. Grouping for Engaged Learning

Collaborative work that is learning-centered often involves small groups or teams of two or more students within a classroom or across classroom boundaries. Heterogeneous groups (including different sexes, cultures, abilities, ages, and socioeconomic backgrounds) offer a wealth of background knowledge and perspectives to different tasks. Flexible grouping, which allows teachers to reconfigure small groups according to the purposes of instruction and incorporates frequent heterogeneous groups, is one of the most equitable means of grouping and ensuring increased learning opportunities.

7. Teacher Roles for Engaged Learning

The role of the teacher in the classroom has shifted from the primary role of information giver to that of facilitator, guide, and learner. As a facilitator, the teacher provides the rich environments and learning experiences needed for collaborative study. The teacher also is required to act as a guide--a role that incorporates mediation, modeling, and coaching. Often the teacher also is a co-learner and co-investigator with the students.

8. Student Roles for Engaged Learning

One important student role is that of explorer. Interaction with the physical world and with other people allows students to discover concepts and apply skills. Students are then encouraged to reflect upon their discoveries, which is essential for the student as a cognitive apprentice. Apprenticeship takes place when students observe and apply the thinking processes used by practitioners. Students also become teachers themselves by integrating what they've learned . . . .

Reference:

Jones, B., Valdez, G, Nowakowski, J., & Rasmussen, C. (1994). *Designing Learning and Technology for Educational Reform.* Oak Brook, IL: North Central Regional Educational Laboratory.

Stop, think, discuss

Think about the bored student whom you observed (or another one you have tried to teach).

a. Begin the group discussion with a brief exchange of what each member thinks causes students not to be engaged in a classroom learning activity.

b. Then, discuss ideas for increasing the likelihood that such students will be engaged in learning.

If you want to read more about addressing motivational differences, developing intrinsic motivation, and options and decision making to enhance motivation and learning, see four brief readings that have been included in the accompanying materials.

A Few Related References*

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Chaskin, R.J. & Rauner, D.M. (eds.) Youth and caring. A special section of the May 1995 issue of the *Phi Delta Kappan.*

Deci, E.L. & Ryan, R.M. (1985). *Intrinsic motivation and self determination in human behavior.* New York: Plenum Press.

Dev, P.C. (1997). Intrinsic motivation and academic achievement: What does their relationship imply for the classroom teacher? *Remedial and Special Education, 18,* 12-19.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age.* New York: Teachers College Press.

Joyce, B., & Weil, M. (1996). *Models of teaching.* 5th ed. Boston: Allyn & Bacon.

Morrow, L.M. & Sharkey, E.A. (1993). Motivating independent reading and writing in the primary grades through social cooperative literacy expectations. *Reading Teacher, 47,* 162-165.

Passe, J. (1996). *When Students Choose Content: A Guide to Increasing Motivation, Autonomy, and Achievement.* Thousand Oaks, CA: Corwin Press, Inc.

Stipek, D.J. (1998). *Motivation to learn: From theory to practice* (3rd ed.). Boston: Allyn & Bacon.

Sweet, A.P. & Guthrie, J.T. (1996). How children's motivations relate to literacy development and instruction. *Reading Teacher, 49,* 660-662.

Wehrmeyer, M. L. & Sands, D. J. (1998). *Making it Happen: Student Involvement in Education Planning, Decision Making, and Instruction.* Paul Brookes Publishing Co.

Weiner, B. (1985). *Human motivation.* New York: Springer-Verlag.

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

Unit C

Objectives

The intent in this Unit is to help you learn more about:

(1) *creating a stimulating and manageable learning environment* (After going over the material, be sure you can discuss at least three general strategies you plan to use in enabling active learning in the classroom.)

(2) *classroom structure* (After going over the material, be sure you can discuss the concept of personalized structure for learning and how you will implement such an approach in the classroom.)

(3) *how instructional techniques are used to (a) enhance motivation and (b) support and guide performance and learning* (After going over the material, be sure you can identify at least two techniques related to each area that you will use in the classroom.)

(4) *turning homework into motivated practice* (After going over the material, be sure you can list at least five examples that you will use in developing student homework activities.)

(5) *assessing learning to plan instruction and provide feedback in a nurturing way* (After going over the material, be sure you can discuss the concept of authentic assessment and how you will use such an approach.)

(6) *conferencing as a key process* (After going over the material, be sure you can discuss the importance of regular dialogues with students and how you will include conferencing as a regular facet of your classroom program.)

(7) *volunteers as an invaluable resource* (After going over the material, be sure you can list at least five ways volunteers could help enable the learning and performance of students who are not responding as you would like during a particular activity.)

Outline for Unit C

1) Creating a Stimulating and Manageable Learning Environment
   a) Designing the Classroom for Active Learning
   b) Grouping Students and Turning Big Classes into Smaller Units
2) Providing Personalized Structure for Learning
3) Instructional Techniques
   a) Using Techniques to Enhance Motivation
   b) Using Techniques to Support and Guide Performance and Learning
4) Turning Homework into Motivated Practice
5) Assessing Student Learning to Plan Instruction and Providing Nurturing Feedback
   a) Planning Instruction
   b) Providing Nurturing Feedback
6) Conferencing as a Key Process
7) Volunteers as an Invaluable Resource
A Few Related References

Unit C

General Strategies for Facilitating Motivated Performance and Practice

Teaching is a fascinating and somewhat mysterious process. Is it an art, or is it an activity that most people can learn to do?

According to Anatole France:

> *Teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.*

Art or not, people do it everyday. Helping someone grow, develop, and learn is one of the most basic forms of human interaction. In some form, we've all been taught. And we've all experienced satisfaction when we succeed in helping others learn and frustration when they don't "get it."

> Frustration is a common feeling when teaching and learning don't go smoothly. The frustration often leads to a conclusion that something is wrong with the students – a lack of effort ("They would have learned it if they had really been trying.") – or a lack of ability ("They would have learned if they were smarter or not handicapped by a disability.").

Sometimes the frustration isn't just with a particular individual; it is with the poor school performance of large numbers of children and adolescents and with the vast amount of adult illiteracy. Such frustration leads to conclusions that something is wrong with the schools ("Teachers need to get *back to basics*!" "Teachers need to be held accountable."), or with certain groups of people ("These youngsters do badly because their parents don't value education."), or with both.

> The frustration is more than understandable. And where there is frustration, it is not surprising that there are accusations and blaming. But blaming, of course, does not solve the problem.
>
> > *A significant part of the solution is to change the ways in which classrooms are operated so that teachers can effectively pursue the art and craft of teaching.*

The focus throughout this unit is on general strategies for enhancing classroom operations and instruction to mobilize active learning.

"Let the main object . . . be as follows: To seek and to find a method of instruction, by which teachers may teach less, but learners learn more; by which schools may be the scene of less noise, aversion, and useless labour, but of more leisure, enjoyment, and solid progress. . . .

Comenius (1632 A.D.)

We all recognize the importance of designing classroom instruction to be a good fit with the current capabilities of a given student. Often, however, the same degree of emphasis is not given to individual differences in motivation. In Unit B, we discussed the primary importance of addressing student motivation. From the standpoint of designing classroom instruction, there are four types of motivational considerations.

- Motivation is a readiness concern. That is, it is a prerequisite to classroom performance and learning. Poor motivational readiness may be (a) a cause of problems, (b) a factor maintaining problems, or (c) both. Thus, if a student does not have an appropriate level of motivational readiness, strategies must be planned and implemented to develop such readiness (including strategies for reducing avoidance motivation).

- *Motivation is a key ongoing process concern.* Many students are caught up in the novelty of beginning to learn a subject but after a few lessons interest often wanes. Similarly, a student may value the idea of becoming a good reader but may not like the ongoing processes involved in classroom reading lessons and thus may not pay attention or may try to avoid them. Strategies must be designed to elicit, enhance, and maintain motivation so that a student stays mobilized.

- *Minimizing negative motivation and avoidance reactions are process and outcome concerns.* Sometimes students perceive instructional activities and classroom structure as unchallenging, uninteresting, overdemanding, overwhelming, overcontrolling, nonsupportive, or even hostile. When this happens, a student is likely to develop negative attitudes and avoidance behaviors related to the immediate situation. Over time, this can develop into negative motivation and avoidance related to school and all it represents. Thus, care must be taken to avoid or at least minimize conditions that produce negative motivation.

- *Enhancing intrinsic motivation is a basic outcome concern.* Achieving such an outcome involves use of strategies that do not overrely on extrinsic rewards and that do enable students to play a meaningful role in making decisions related to valued options.

In general, our emphasis in this unit is on strategies you can use to design classroom instruction to be a good match with the current motivation and capabilities of a given student. The key to a good fit, of course, is ensuring procedures are *perceived by learners* as good ways to reach their goals.

For motivated learners, facilitating learning is a fairly straight forward matter. The focus is on helping establish ways for learners to attain their goals by maintaining and possibly enhancing their motivation so that they learn effectively, efficiently, and with a minimum of negative side effects. Although the process involves knowing when, how, and what to teach, it also involves knowing when and how to structure the situation so that people can learn on their own.

> *Sometimes all that is needed is to help clear the external hurdles to learning. At other times, facilitating their learning requires leading, guiding, stimulating, clarifying, and supporting.*

It is useful to think about all this in terms of a set of procedural objectives. General strategies involve:

- establishing and maintaining an appropriate working relationship with students (for example, through creating a sense of trust, open communication, providing support and direction as needed)
- clarifying the purpose of learning activities and procedures, especially those designed to help correct specific problems
- clarifying the reasons procedures are expected to be effective
- clarifying the nature and purpose of evaluative measures
- building on previous learning
- presenting material in ways that focus attention on the most relevant features of what is to be learned (modeling, cueing, scaffolding)
- guiding motivated practice (for instance, suggesting and providing opportunities for meaningful applications and clarifying ways to organize practice)
- providing continuous information on learning and performance
- providing opportunities for continued application and generalization (for example, concluding the process by addressing ways in which the learner can pursue additional, self-directed learning in the area, or can arrange for additional support and direction)

These matters are covered in this unit under the following headings: (1) creating a stimulating and manageable learning environment, (2) providing a personalized structure for learning, (3) using instructional techniques that enhance motivation and guide performance and learning, (4) turning homework into motivated practice, and (5) assessing student learning to plan instruction and provide nurturing feedback.

1) Creating a Stimulating and Manageable Learning Environment

Every teacher knows that the way the classroom setting is arranged and instruction is organized can help or hinder learning and teaching. The ideal is to have an environment where students and teachers feel *comfortable, positively stimulated, and well-supported* in pursuing the learning objectives of the day.

Approached from the perspective of intrinsic motivation, a classroom environment benefits from

- ensuring available options encourage active learning (e.g., authentic, problem-based, and discovery learning; projects, learning centers, enrichment opportunities)
- grouping students in ways that turn big classes into smaller learning units and that enhance positive attitudes and support for learning

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Stop, think, discuss

Make a list of what you would want to have in a classroom so that students would find it an appealing place to learn.

Make another list of the types of activities you would want to have available for students to engage them in learning.

Education is not the filling of a pail, but lighting of a fire.

William Butler Keats

It is the supreme art of the teacher to awaken joy to creative expression and knowledge.

Albert Einstein

a) Designing the Classroom for Active Learning

Teachers are often taught to group instructional practices under topics such as direct instruction, indirect instruction, interactive instruction, independent study, and experiential learning (see Exhibit below).

A document entitled *Instructional Approaches: A Framework for Professional Practice* published by the Curriculum and Instruction Branch of the Saskatchewan Education department in Canada offers the following categorization of instructional strategies:

- **Direct Instruction** (structured overviews; explicit teaching; mastery lectures; drill and practice; compare and contrast; didactic questions; demonstrations; guides for reading, listening, and viewing)
- **Indirect Instruction** (problem solving; case studies; inquiry; reading for meaning; reflective study; concept formation: concept mapping; concept attainment; cloze procedure)
- **Interactive instruction** (debates; role playing; panels; brainstorming; peer practice; discussion; laboratory groups; cooperative learning groups; problem solving; circle of knowledge; tutorial groups; interviewing)
- **Independent study** (essays; computer assisted instruction; learning activity packages; correspondence lessons; learning contracts; homework; research projects; assigned questions; learning centers)
- **Experiential learning** (field trips; conducting experiments; simulations; games; focused imaging; field observations; role playing; model building; surveys)

See – http://www.sasked.gov.sk.ca/docs/policy/approach/copyright.html

All these forms of instruction are relevant. However, *teaching* strategies must always have as their primary concern producing effective *learning*. Effective learning requires ensuring that the student is truly engaged in learning. This is especially important in preventing learning, behavior, and emotional problems, and essential at the first indications of such problems.

Thus, the focus here is on discussing the concept of *active learning*. In doing so, we will discuss examples of instructional approaches that are designed to enhance learner motivation to learn.

Simply stated, active learning is *learning by doing, listening, looking, and asking;* but it is not just being active that counts. It is the mobilization of the student to seek out and learn (see Exhibit on the following page). Specific activities are designed to capitalize on student interests and curiosity, involve them in problem solving and guided inquiry, and elicit their thinking through reflective discussions and specific products. Moreover, the activities are designed to do all this in ways that not only minimize threats to feelings of competence, self-determination, and relatedness to others, but enhance such feelings.

There are many examples of ways to promote active learning at all grade levels. It can take the form of class discussions, problem-based and discovery learning, a project approach, involvement in "learning centers" at school, experiences outside the classroom, and independent learning in or out of school . For example, students may become involved in classroom, school-wide, or community service or action projects. Older students may be involved in "internships." Active learning methods can be introduced gradually so that students can be taught how to benefit from them and so that they can be provided appropriate support and guidance.

> *Active learning in the form of interactive instruction, authentic, problem-based, discovery, and project-based learning does much more than motivate learning of subject matter and academic skills. Students also learn how to cooperate with others, share responsibility for planning and implementation, develop understanding and skills related to conflict resolution and mediation, and much more. Moreover, such formats provide a context for building collaborations with other teachers and school staff and with a variety of volunteers.*

Exhibit
Active Learning

As presented by Fred Newmann, Helen Marks, & Adam Gamoran (in a 1996 *American Journal of Education* article entitled "Authentic Pedagogy and Student Performance"):

Active learning is "... students actively constructing meaning grounded in their own experience rather than simply absorbing and reproducing knowledge transmitted from subject-matter fields . . . ."

Examples are . . .

- Small group discussions
- cooperative learning tasks
- independent research projects
- use of hands on manipulatives, scientific equipment, and arts and crafts materials
- use of computer and video technology
- community-based projects such as surveys, oral histories, and volunteer service.

Components of Active Learning in the Classroom are...

- *Higher-order thinking* – Instruction involves students in manipulating information and ideas by synthesizing, generalizing, explaining, hypothesizing, or arriving at conclusions that produce new meanings and understandings for them.

- *Substantive conversation* – Students engage in extended conversational exchanges with the teacher and/or their peers about subject matter in a way that builds an improved and shared understanding of ideas or topics.

- *Deep knowledge* – Instruction addresses central ideas of a topic or discipline with enough thoroughness to explore connections and relationships and to produce relatively complex understandings.

- *Connections to the world beyond the classroom* – Students make connections between substantive knowledge and either public problems or personal experiences.

On this and the following pages we offer brief overviews of a variety of approaches that encompass strategies for actively engaging students in learning and practicing what has been learned. Included are discussions of interactive instruction, authentic learning, problem-based and discovery learning, project-based learning, learning centers, and enrichment activity.

Interactive Instruction. One of the most direct ways in which teachers try to engage students is through class discussion and sharing of insights related to what they have been learning, often bringing in their own experiences and personal reactions. A variety of topics can also be introduced as a stimulus for discussion. Discussion not only helps them practice and assimilate what they have been learning, it adds opportunities to learn more (e.g., from teacher clarifications and peer models). And, of course, it is the most direct way to practice and enhance such discussion skills as organizing and orally presenting one's ideas. Discussions also can provide an impetus for further independent learning.

For students who are just learning to engage in discussion or who have an aversion to such a format, it is important to keep discussions fairly brief and pursue them with small groups. If a student who wants to participate but is having trouble doing so, it will be important to take some individual time away from the group to help them develop essential readiness skills (e.g., listening, organizing one's thoughts, interacting appropriately with others).

Whole class discussion is reserved for occasions when all those in the class are particularly interested in some event that has occurred or a topic that affects them all. These are invaluable opportunities to enhance a sense of community.

As guidelines for effective discussions, it is usually suggested that teachers:

- use material and concepts familiar to the students
- use a problem or issue that does not require a particular response
- stress that opinions must be supported
- provide some sense of closure to the discussion (e.g., a summary of what was said, insights and solutions generated, any sense of consensus) and elaborate on implications for the students lives now and in the future.

Authentic Learning. Authentic learning (sometimes called genuine learning) enables teachers to facilitate active learning by connecting the content, process, and outcomes to real-life experiences. The concept encompasses the notion of having students learn in authentic contexts outside of the classroom (e.g., around the school, in the neighborhood, at home).

The intent is to enhance student valuing of the curriculum by having students work on somewhat complex problems and tasks/projects they naturally experience in their daily lives or will experience later in the world of work.

The emphasis is on learning activities that have genuine purpose, such as focusing on current problems or controversies affecting the students, projects that create products that students value. They can range from simple activities such as groups writing letters to the local newspaper to more complex projects such as cross-subject thematic instruction, science and art fairs, major community service projects, and a variety of on-the-job experiences. (Specific examples include: developing a classroom newspaper or multimedia newscast on a controversial topic, carrying out an ecological project, developing a display for the school regarding the neighborhood's past, present and future, planning a city of the future, developing a school website or specific sections of the school's web site.)

Often, the activity can be pursued in a variety of ways. And the process results not simply in acquisition of academic knowledge and skills.

Good authentic tasks involve

>locating, gathering, organizing, synthesizing, and interpreting information and resources

>making collaborative decisions

>problem solving >elaborating >explaining >evaluating

The process also usually involves public exhibiting of products and related presentations to others outside the class.

Properly implemented, authentic learning activity helps develop

- inquiry (learning to ask relevant questions and search for answers)
- critical and divergent thinking and deep understanding
- judgment
- general decision making and problem solving capability
- performance and communication skills.

Such an approach also can contribute to enhancing a sense of community.

> *The key to properly implementing authentic learning activity is to minimize "busy work" (e.g., simply doing things) and ensure the major learning objectives are being accomplished.*

Problem-Based and Discovery Learning. Problem-based and discovery learning processes are built around a series of active problem-solving investigations. These approaches overlap with the concept of authentic learning; at their root is the notion of active learning.

It is assumed that, with appropriate guidance and support, students will be motivated by the defined problem and by the process of discovery and will use their capabilities to make pertinent observations, comparisons, inferences, and interpretations and arrive at new insights.

In general, the approach begins with the teacher raising a question or series of questions and leading a discussion to identify a problem to be explored. Students decide how to investigate the problem, and then, working individually and/or in small groups, they conduct "investigations" (e.g., manipulate phenomena, make observations, gather and interpret data, and draw inferences). Based on all this, they draw conclusions (e.g., answers) and make generalizations.

Exhibit
Problem-Based Learning

From: PBL Overview http://www.mcli.dist.maricopa.edu/pbl/info.html

Problem-based learning (PBL) is a term that some have adopted for one type of authentic learning. It is described as a "total approach to education . . . . PBL is both a curriculum and a process. The curriculum consists of carefully selected and designed problems that demand from the learner acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies, and team participation skills. The process replicates the commonly used systemic approach to resolving problems or meeting challenges that are encountered in life and career . . . .

In problem-based learning, the traditional teacher and student roles change. The students assume increasing responsibility for their learning, giving them more motivation and more feelings of accomplishment, setting the pattern for them to become successful life-long learners. The faculty in turn become resources, tutors, and evaluators, guiding the students in their problem solving efforts."

Project-based learning. This approach is designed as a alternative to overreliance on textbooks. As with authentic learning, it is built on the assumption that student interest (intrinsic motivation) and effort is mobilized and maintained and learning is enhanced when students engage in meaningful investigation of interesting problems. The process also draws on the motivational benefits of having students work and learn cooperatively with each other to develop the project, share learning strategies and background knowledge, and communicate accomplishments.

Exhibit
Project-Based Learning

As stated by Ralph Ferretti and Cynthia Okolo, "Project-based learning offers an intrinsically interesting and pedagogically promising alternative to an exclusive reliance on textbooks. When students have the opportunity to engage in meaningful investigation of interesting problems for the purpose of communicating their findings to others, their interest in learning is enhanced . . . . Increased interest can yield significant cognitive benefits, including improved attention, activation and utilization of background knowledge, use of learning strategies, and greater effort and persistence . . . . Moreover, during project-based learning activities, students have the opportunity to cooperate and collaborate with peers."

Ferretti and Okolo outline five essential features of project-based instruction:

- An authentic question or problem provides a framework for organizing concepts and principles.
- Students engage in investigations that enable them to formulate and refine specific questions, locate data sources or collect original data, analyze and interpret information, and draw conclusions.
- These investigations lead to the development of artifacts that represent students' proposed solutions to problems, reflect their emerging understanding about the domain, and are presented for the critical consideration of their colleagues.
- Teachers, students, and other members of the community of learners collaborate to complete their projects, share expertise, make decisions about the division of labor, and construct a socially mediated understanding of their topic.
- Cognitive tools, such as multimedia technology are used to extend and amplify students' representational and analytic capacities . . . .

They also note with respect to their experiences: ". . .we provide students with guidance and assistance in specific components of project construction, even though each group is responsible for the selection of information in its project. We rely on a combination of teacher-directed instruction and explicit modeling, dialogue with individuals and groups, and scaffolding through worksheets . . . . Thus, we have developed modules to teach students (specific skills, such as) how to read source materials with a partner . . . (and) we provide students with planning sheets that scaffold many of the activities they must utilize, such as taking notes or organizing information on a card . . . ."

From "Authenticity in Learning: Multimedia Design Projects in the Social Studies for Students with Disabilities" by Ralph Ferretti & Cynthia Okolo (1996). *Journal of Learning Disabilities, 29*, 450-460.

With respect to implementation of project-based learning, various writers stress that students should be involved in choosing a topic, and the topic should be multifaceted enough to maintain student engagement over an extended period of time. Because of the scope of such projects, students must first learn how to work in a cooperative learning group and then how to share across groups.

Exhibit
More on Project-Based Learning

Lillian Katz and Sylvia Chard stress:

> *A main aim of project work in the early years it to strengthen children's dispositions to be interested, absorbed, and involved in in-depth observation, investigation, and representation of some worthwhile phenomena in their own environments.*

From their perspective, among the factors to consider in selecting and implementing projects are: (1) characteristics of the particular group of children, (2) the geographic context of the school, (3) the school's wider community, (4) the availability of relevant local resources, (5) the topic's potential contribution to later learning, and (6) the teacher's own knowledge of the topic.

CRITERIA FOR CHOOSING PROJECTS

- It is directly observable in the children's own environment (real world)
- It is within most children's experiences
- First-hand direct investigation is feasible and not potentially dangerous
- Local resources (field sites and experts) are favorable and readily accessible
- It has good potential for representation in a variety of media (e.g., role play, construction, writing, multi-dimensional, graphic organizers)
- Parental participation and contributions are likely, and parents can become involved
- It is sensitive to the local culture as well as culturally appropriate in general
- It is potentially interesting to many of the children, or represents an interest that adults consider worthy of developing in children
- It is related to curriculum goals and standards of the school or district
- It provides ample opportunity to apply basic skills (depending on the age of the children)
- It is optimally specific: not too narrow and not too broad

Excerpted from "Issues in Selecting Topics for Projects. ERIC Digest." Authors: L. Katz & S. Chard. ERIC Identifier: ED424031. Publication Date: 1998-10-00

Learning Centers. The idea of learning centers has been around a long-time and is an especially useful strategy for mobilizing and maintaining student engagement. It goes well with the concept of authentic learning and processes such as discovery and problem-based learning. As Martha McCarthy noted decades ago,

> Many problems of motivation can be attributed to the fact that children are bored because the class is moving too slowly or too quickly. Also, some behavior problems arise because children are restless when they are required to sit still for long periods of time. These problems can be reduced by supplementing the regular classroom program with learning-center activities... The learning center tries to deal with the reality that pupils learn at different rates, have different interests and needs, and are motivated when they are permitted to make choices based on these unique needs and interests. Learning centers are not a panacea for all the problems that confront education today, but well-planned centers can enhance the learning environment.

Among the possible uses of learning centers, she discusses:

1. Total learning environment – The entire instructional program is individualized for each child. Pupils engage in small-group and individual activities at various learning stations throughout the room. Teacher-conducted learning activities are kept at a minimum and are used only when adult leadership is necessary.

2. Remedial work – Pupils who have not mastered basic skills are assigned to learning centers to work intensively on those skills. Pupils work with audio-visual materials and individualized-instruction programs or help one another as peer tutors.

3. Drill work – To reinforce knowledge or skills learned in regular classroom instruction, pupils are assigned to learning centers equipped with materials for drill work.

4. Interest activities – At specific times during the day, pupils are assigned to areas of their choice to work on activities they enjoy such as arts and crafts, games, puzzles, science experiments, or cooking. Pupils who have earned free time or pupils who need a change of pace can be assigned to these areas.

5. Enrichment activities – Pupils who are fast learners are assigned to a learning-center activity designed to enhance their recent learning and to challenge them to go beyond the material presented to the entire class. Each teacher should carefully decide how the learning centers can most profitably be designed to meet the unique needs of the children in his or her classroom. In short, the types of activities offered in the centers should be determined by careful diagnosis of the pupils' needs. Although learning centers are usually associated with self-directed activities for pupils, centers are not limited to this approach. If all the pupils are engaging in center activities simultaneously, one or more stations may be teacher directed. Also, paraprofessionals, volunteers, or pupils who have specific talents could direct centers at various times. If the purpose of learning centers is to offer more options to the pupils, provisions should be made for differences in learning styles as well as differences in academic levels and interests.

(See the Exhibit on the following page for
McCarthy's ideas on establishing learning centers.)

Exhibit
Establishing Learning Centers

The departure from total-class, teacher-directed activities to individualized center activities creates more pupil options and involvement, but also requires more organization on the part of the teacher. In addition, the implementation of learning centers demands extra work, at least initially. Several considerations require attention if the learning centers are to be successful:

1. There must be a clearly stated purpose for the centers, one that is fully understood by the teacher and the pupils.

2. Pupils must be familiar with all activities in the centers and understand the mechanics of working in centers. Practice sessions during which the entire class explores each activity and learns how to record the work alone are essential before the pupils participate in the rotation of activities...

3. The teacher should give responsibility to the pupils gradually and reinforce each small step pupils take toward assuming responsibility for their own progress. The teacher should work on pupil accountability in large-group, teacher-directed activities for some time before expecting pupils to be in self-directed learning centers. It is critical for pupils to master prerequisite skills before moving to a more difficult stage. When the pupils are ready to work in centers, more structure should be provided than is desired as a final goal. The teacher may want to start with three centers and have every child attend each center for a certain period of time daily. For a while, the options in each center should remain limited. Later, the child can be allowed to choose the center he or she wants to attend and decide how long to stay there...After pupils become accustomed to working in centers, they could fill out individual contracts that would designate center activities to be pursued according to prespecified criteria. Thus, the activities schedule would become totally individualized.

4. Pupils need to know exactly what options are available to them, and they must be accountable for their activities. Walking around the room and fighting should not be options! To monitor pupils individual name tags can be used. Each pupil would place his tag on a tag board at the center he is attending. At a glance at the tag boards, the teacher would know where each pupil should be working. A wall chart could also be used for this purpose, or each child could fill out a simple form showing his center schedule for the day. Pupil contracts can also be useful, and they can become extremely sophisticated. At first, however, contracts should be kept simple with limited options. Initially, the pupil should concentrate on completing the activity he has contracted to do. Later, the contract can emphasize mastery of a certain skill or group of skills and offer several options as means of accomplishing that goal.

5. Pupil accountability must be emphasized at all levels. Pupils can be expected to assume increased responsibility for their own learning only after they have mastered the required skills. At the basic level of accountability, the pupil learns to be responsible simply for attending to some task. At the next level, the pupil is accountable for choosing tasks that are appropriate to his or her needs, level, or interest (depending on the purpose of the centers). At the third level, the pupil is accountable for each activity pursued while at the center.Some method of reporting work must accompany each activity. The child may be required to fill out a brief form, complete an answer sheet, show written work, or prepare a simple report on a game played. Each child needs to be able to look back over the time spent at the center and review accomplishments. Also, this record is essential if the teacher is to keep abreast of pupils' progress and needs. Accountability cannot be shifted to the pupils immediately. The teacher must be certain that requisite skills are mastered before the pupil is expected to assume self-direction in centers. Activities that require cooperative behavior (games, for example) should be placed in centers only after pupils have demonstrated that they can handle such activities. The teacher should continually reinforce the pupils' progress in accepting new levels of responsibility. There are almost no limits as to how far pupils can go if the teacher works with them patiently and consistently. As pupils feel that they are expected to assume more accountability, they will feel more self-worth and seek additional responsibility.

6. A variety of options should be available at the centers. Activities should fit into various levels and learning styles. Some activities might involve movement, some manipulation, some group work, and some independent quiet activity. However, the teacher should not go overboard with the quantity of activities before he or she or the pupils have adapted to using centers. It is important to address quality before quantity. The teacher will be wise to start with a few well-planned activities so that pupils can adjust to the mechanics of using centers...

7. All activities in the learning center should have objectives, directions for use, and a record-

keeping system easily understood by the pupils. Color coding can be used for pupils who cannot read. Attractive posters with reminders of directions can help pupils and enhance the classroom environment. If a pupil does not understand directions for activities or the system of keeping records, he will feel that the teacher and the environment are disorganized. Frustration and apathy toward the centers will result. Once a poor attitude is established, it is extremely difficult to change, even if the situation improves. Hence, time spent in planning the transition into centers is *much* more valuable than corrective measures later.

8. The change to centers should be an exciting adventure for the pupils. Participation in centers should be seen as a rewarded privilege that pupils have earned by reaching a certain level of growth in becoming responsible members of the group.

9. Standards of behavior must be established and agreed on by the total group. These standards should be posted in the room and enforced.

10. Procedures should be established to make it possible for pupils at the centers to signal for assistance without causing a major classroom disturbance. One technique is to have pupils raise flags or signs when assistance is needed. The signs might read "Help," "Work check," or "Unit test." Another technique is to use peer tutors. Pupils who demonstrate competency in performing certain activities can serve as helpers for their classmates.

11. Pupil-teacher conferences are a must. Ideally an adult should meet with each pupil weekly for a brief conference on his or her progress in the centers. A pupil's work for the week can be pulled from his folder, future goals set, and guidance for the next week's choices given. If pupils never get feedback or reinforcement for their work, the centers can quickly lose their meaning.

12. Centers should be attractive and appropriately arranged. If the pupils need to do seatwork, space should be provided close to the center. If cooperative activities are used, pupils should be able to pull several chairs together or have space on the floor to engage in the activity where it will not distract other pupils who are working independently. Quiet activities should be placed in a specified section of the room. Ditto sheets and books can be stored in magazine racks. Cushions and rug samples add to reading corners, and for certain listening activities cubicles are needed. In deciding where to place various centers, the teacher should consider the layout of the room, the flow of traffic, and the layout of the electrical outlets. Visual barriers (screens, bookcases, and dividers) seem to reduce distractions considerably.

From: "The How and Why of Learning Centers" by Martha M. McCarthy (1977). *Elementary School Journal*, *77*, 292-299.

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Tips for Teachers Re. Learning Centers
See: http://vpsd6.vrml.k12.la.us:8000/~monah/Centers.htm

> "Centers can be the hub of a classroom with students rotating through them for lessons all day or centers can be a time allotted to work on skills that need to be redefined and aligned! Centers can also be the time that you individualize your curriculum."
>
> Mona Herbert

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Examples of Types of Centers

Single-Subject Centers

1. Reading Center
2. Math Center
3. Science Center
4. Writing/Spelling/Handwriting Center
5. Social Studies Center
6. Foreign Language Center

Remedial Learning Centers

7. Any of the subjects listed above

Enrichment Centers

8. Library Center
9. Computer Center
10. Art/Music Center
11. Activities and Game Center
12. Listening Center

Independent-Study Centers

13. Research Center
14. Discovery Center
15. Invention Center

Enrichment Activity. The richer the environment, the more likely students will discover new interests, information, and skills. Enrichment comprises opportunities for exploration, inquiry, and discovery related to topics and activities that are not part of the usual curriculum. Opportunities are offered but need not be taken. No specific learning objectives may be specified. It is assumed that much will be learned and, equally as important, there will be a greater sense of the value and joy of pursuing knowledge.

Enrichment activities often are more attractive and intriguing than those offered in the developmental curriculum. In part, this is because they are not required, and individuals can seek out those that match their interests and abilities. Enrichment activities also tend to be responsive to students; whatever doesn't keep their attention is replaced.

Here is an example of one school's way of organizing enrichment offerings:

1. Arts: stained glass, raku, ceramics, pottery, painting, junk art, maskmaking, puppetry, jewelry-making, basket weaving, air brushing, silkscreening, photography, drama, street dancing, line dancing, folk dancing, hula, creative movement, video/filmmaking, card making, tile mosaics

2. Science/Math: Dissection, kitchen physics, kitchen chemistry, marine biology, rocketry, robotics, K-nex, string art, math games and puzzles, science and toys, boatmaking, Hawaiian ethnobotany, and laser/ holography

3. Computer: computer graphics, internet, computer simulations, computer multimedia, and computer Lego logo

4. Athletics: basketball, baseball, volleyball, football, soccer, juggling, unicycling, golf

5. Others: cooking, magic, clowning around, French culture, Spanish culture, Japanese culture, board games

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Because so many people think of enrichment as a frill, it is not surprising that such activities may be overlooked – especially for youngsters who manifest learning and behavior problems. After all, these persons are seen as needing all the time that is available for "catching up." This view is unfortunate. The broader the curriculum, the better the opportunity for creating a good motivational match and for facilitating learning throughout an important range of developmental tasks and remedial needs.

Enrichment should be an integral part of daily classroom time. It should be part of school-wide opportunities during the day and after school. After school programs not only enable schools to stay open longer to provide academic support and safe havens, drug and violence prevention, and various services such as counseling, they also provide opportunities for youngsters to participate in supervised recreation, chorus, band, the arts and to use the internet. All this allows youngsters to learn skills that often are not part of the school's curricula, such as athletic and artistic performance skills. In some cases, these experiences lead to lifelong interests or careers. But, perhaps just as importantly, youngsters are able to enhance their sense of competence and affiliation.

Independent Study

> Independent learning has implications for responsible decision-making, as individuals are expected to analyze problems, reflect, make decisions and take purposeful actions. To take responsibility for their lives in times of rapid social change, students need to acquire life-long learning capability. As most aspects of our daily lives are likely to undergo profound changes, independent learning will enable individuals to respond to the changing demands of work, family and society. (Saskatchewan Education, 1988; see: http://www.sasked.gov.sk.ca/docs/policy/approach/copyright.html)

The term *Independent Study* covers a variety of learning activities. Certainly, students at every grade who can and want to function independently of the teacher in pursuing aspects of the school agenda should be provided opportunities to do so. This is not only important for them, but also allows the teacher more time for those students who need it. Other independent study activities are designed to foster the student's ability to function autonomously, as well as enhancing their intrinsic motivation to do so. Some of this activity may involve some partnering with one or more peers. All the activity is monitored by the teacher to ensure it is appropriate and being pursued effectively. As always, when it is evident a student is not functioning effectively, the teacher will want to take time to find out whether the problem is attitudinal or related to skill deficits and take steps to address the matter.

All the above strategies engage students in learning by accounting for individual differences in current interests and capabilities. More specifically, the strategies

- *provide a wide variety of stimulating and often novel activities*
- *enable student decision making among valued options and ones they can expect to reach desired outcomes*
- *enable teachers to create cooperative and caring contexts for learning by establishing a learning environment where students work together in small groups, as well as independently*

A Few Other Examples of Activities That Can Be Used Regularly to Engage Learners and Enrich Learning

library activities; music/art/drama; student exhibitions & performances; outside speakers & performers; field trips; mentoring & service learning; clubs; special interest groups; recreation & similar organized activities; school-wide activities such as student council and other leadership opportunities; athletics; school environment projects (e.g. mural painting, gardening, school clean-up and beautification); poster/essay contests sales events (e.g. candy, t-shirts); book fairs; health fairs; student newspapers/ magazines

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Block Scheduling – When More Time is Needed

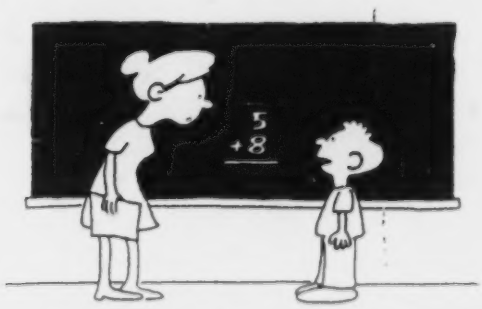
Active learning can benefit from instructional periods that range up to two hours. Advocates suggest that such a period of time encourages in-depth instruction and may be helpful in preparing students for exit exams. The extended time is seen as enabling teachers to devote more time to core subjects and to assist students who need extra help.

In secondary schools, the prototype for block scheduling is combining two classes (e.g., English and social studies) and using the combined time (e.g., 95 minutes) to focus on one or the other on alternate days. With the widespread use of exit exams, the approach is gaining new popularity. Over 40% of California high schools report using some form of block scheduling and the trend is growing.

Of course, the longer periods require considerable attention to student engagement when planning lessons. In particular, the strategies discussed throughout this module reflect the type of approach that makes block scheduling worth doing. Available studies indicate that, done appropriately, block scheduling can improve student achievement.

More generally, block scheduling has been described as the key to quality teaching and learning time. It provides a way to deal with class size and accommodating differences in students' rates of learning.

See *Block Scheduling: The Key to Quality Learning Time* by R. Canady & M. Rettig in NAESP's Principal Magazine (Jan. 2001). On line at: www.naesp.org/comm/p0101c.htm



GOSH, MRS. THOMPSON, I WAS READY TO LEARN MATH YESTERDAY TODAY I'M READY TO LEARN TO READ

b) Grouping Students and Turning Big Classes into Smaller Units

In their report entitled *High Schools of the Millennium*, the workgroup states:

> The structure and organization of a High School of the Millennium is very different than that of the conventional high school. First and foremost, [the school] is designed to provide small, personalized, and caring learning communities for students . . . . The smaller groups allow a number of adults . . . to work together with the students . . . as a way to develop more meaningful relationships and as a way for the teachers to better understand the individual learning needs of each student. . . .
>
> Time is used differently . . . . Alternatives schedules, such as a block schedule or modified block schedule, create longer class periods that allow students to become more actively engaged in their learning through more in-depth exploration . . . . The longer instructional times also allow for multiple learning activities that better meet the different learning styles of students.

Grouping. Aside from those times when a learning objective is best accomplished with the whole class, it is important to think of creating small classes out of the whole. This involves grouping students in various ways, as well as providing opportunities for individual activity.

> *Clearly, no one should be grouping students in ways that harm them. This applies to putting students in low ability tracks or segregating students who are behavior problems.*

But grouping is essential for effective teaching. *Appropriate* grouping facilitates student engagement, learning, and performance. Besides enhancing academic learning, it can increase intrinsic motivation by promoting feelings of personal and interpersonal competence, self-determination, and positive connection with others. Moreover, it can foster autonomous learning skills, personal responsibility for learning, and healthy social-emotional attitudes and skills.

Done appropriately, students are grouped and regrouped flexibly and regularly by the teacher based on individual interests, needs, and for benefits to be derived from diversity. When teachers team teach or collaborate in other ways, such grouping can be done across classrooms. Small learning groups are established for cooperative inquiry and learning, concept and skill development, motivated practice, peer- and cross-age tutoring, and other forms of activity that can be facilitated by peers, aides, and/or volunteers.

In a small group (e.g., two to six members) students have more opportunities to participate. In heterogeneous, cooperative learning groups, each student has an interdependent role in pursuing a common learning goal and can contribute on a par with their capabilities. All groups provide opportunities to enhance interpersonal functioning and an understanding of working relationships and of factors effecting group functioning.

Carol Ann Tomlinson in her 1999 book *The Differentiated Classroom: Responding to the Needs of All Learners* delineates ways to minimize whole-class instruction through use of *flexible small group teaching* and facilitating independent learning. She notes that nearly all educators agree with the goal of differentiating instruction, but teachers may lack strategies for making it happen. To avoid lockstep instruction, she suggests strategies such as using *stations* (setting up different spots where students work on various tasks simultaneously) and *orbital studies* (with guidance and support, students are involved in short term – 3-6 week – independent investigations related to a facet of the curriculum). Tomlinson stresses that differentiated instruction is not a form of tracking – just the opposite. it enables teachers to give every child access to the curriculum and ensures that each makes appropriate progress.

A well-designed classroom enables a teacher to spend most of the time (1) working directly with a group while the rest of the students work in small groups and on independent activities or (2) rotating among small groups and individual learners. Effective grouping is most likely when teachers have adequate resources (including space, materials, and access to additional bodies). The key is teaching youngsters to work well with each other, with other resource personnel, and at times independently.

Types of Groupings

Needs-Based Grouping: **Short-term** groupings are established for students with similar learning needs (e.g., to teach or reteach them particular skills and to do so in keeping with their current interests and capabilities).

Interest-Based Grouping: Students who already are motivated to pursue an activity usually can be taught to work together well on active learning tasks.

Designed-Diversity Grouping: For some objectives, it is desirable to combine sets of students who come from different backgrounds and have different abilities and interests (e.g., to discuss certain topics, foster certain social capabilities, engender mutual support for learning).

In all forms of grouping, approaches such as cooperative learning and computer-assisted instruction are relevant, and obviously, it helps to have multiple collaborators in the classroom. An aide and/or volunteers, for example, can assist with establishing and maintaining well-functioning groups, as well as providing special support and guidance for designated individuals. As teachers increasingly open their doors to others, assistance can be solicited from tutors, resource and special education teachers, pupil services personnel, and an ever widening range of volunteers (e.g., Reading Corps tutors, peer buddies, parents, mentors, and any others who can bring special abilities into the classroom and offer additional options for learning). And, of course, team teaching offers a potent way to expand the range of options for personalizing instruction.

Exhibit

Differentiated Instruction and Making Smaller Units out of Larger Classes:
Elementary School Examples

In the Winter 2000 issue of Curriculum, the Association for Supervision and Curriculum Development provides the following descriptions of how teachers are using strategies to differentiate instruction and make smaller units out of larger classes.

"First grade teachers Gail Canova and Lena Conltey ... use supported reading activities to help young learners of various abilities strengthen reading skills. On Mondays, (they) read stories to the entire class but break the class into groups according to challenge levels for the next three days. On Fridays, the whole class reviews the story once more to measure improvements and reinforce learning. To help students of differing abilities improve writing skills, (they) have established peer tutoring groups. In the groups, children read their work aloud and help one another with spelling and editing as they create their own books." . . .

"Pat Rutz, a 1st and 2nd grade teacher ..., differentiates for avanced learners by using curriculum compacting. If some of her students have mastered the concept of place value, for example, they can pursue higher-level math work independently while she works with the rest of the class.... To be ready for young learners whose abilities outrun the rest of the class or who need extra help, (she) has prepared 'math boxes' that offer activities aimed above and below grade-level expectations for each math concept. During any lesson, 'everyone's doing the same work ... but at different levels of complexity." . . .

"...4th grade teacher Laurie Biser differentiates math lessons according to processes. Some work better with paper and pencils, some need manipulatives, and some learn best at the computer." For example, to account for differences related to memorizing multiplication tables, she asks students, "How do you think you could learn this best?" She finds that students choose the activities that let them learn best (e.g., using flash cards with a partner, writing, drawing, creating three-dimensional models).

"...Penny Shockly ... uses tiered assignments to engage her 5th graders at all levels of ability. When she begins the unit on perimeter, area, and volume, (she) first presents a short, hands-on lesson that defines the whole-class objective and lays the foundation for individual practice. Togther, she and the students measure various sizes of cereal boxes so that everyone is clear about definitions and processes. Then, in groups of two, students receive activity packets. The more concrete learners receive packets with worksheets that direct them to measure their own desks and classroom furniture. In this highly structured activity, students practice calculating the perimeters, areas, and volumes of things they can actually see and touch. Shockley is on hand to offer help and to extend the activity, for those who are ready, by helping students find a way to arrange the desks so that they have the smallest possible perimeter. Other students with greater abstract reasoning skills receive packets that direct them to design their own bedrooms and to create scale drawings. They also calculate the cost and number of five-yard rolls of wallpaper borders needed to decorate their rooms. From catalogs, they select furniture and rugs that will fit into their model rooms. These details provide extensive practice, beginning with such tasks as determining how many square feet of floor space remain uncovered. This open-ended assignment offfers higher-ability students an opportunity to extend their learning as far as they want to take it."

Exhibit

Differentiated Instruction and Making Smaller Units out of Larger Classes:
Secondary School Examples

In the Winter 2000 issue of Curriculum, the Association for Supervision and Curriculum Development provides the following descriptions of how teachers are using strategies to differentiate instruction and make smaller units out of larger classes.

Middle school teacher Wendy Raymond ". . . asks her students to select one of 30 thematically related books .... Then she groups students who are interested in the same titles, usually about four or five students per group, and teaches them how to function as a literature circle -- students learn the roles of discussion directors, connectors (students who make connections to things in the real world), illustrators, literary luminaries (students who point out great figurative language), and vocabulary enrichers (those who identify words that most students might not know). With each new book, students regroup and jobs rotate, but each group sets its own schedule for discussions and assignments. When (they) come together for whole-class activities, they explore themes common to all of the books, followed by assignments that might require students to create their own short literary work that typifies the genre they have just studied."

Rob Frescoln, a 7th grade science teacher, has students whose reading levels range from 2nd through beyond 7th grade. "To help all his students succeed with research papers, (he) provides science texts at several reading levels and uses mixed-ability groupings. Each of five students in a mixed-ability group might research a different cell part by gathering information from books at her own reading level. Then groups split up so that all students with the same cell assignment compare notes and teach one another. Finally, students return to their original groups so that every member of each group can report to the others and learn about the other cell parts. 'It's the coolest thing in the world to see a lower ability kid teaching a higher-ability kid what he's learned,' says Frescoln."

In Michigan, 8th grade science teacher Marie DeLuca offers tiered assignments in helping her students learn the concept of density. "To start everyone off on the same foot, (she) uses an introductory lab activity that allows the whole class to compare the differing weights of identical volumes of sand and oil. The object is to determine whether a ship could carry the same amount of sand as it could oil, and how this manifests the property of density. (Then, she) assigns students an internet activity that explores the causes of the sinking of the Edmund Fitzgerald -- but at different levels of synthesis and analysis, depending on student ability. Homework assignments ask higher-ability students to design cargo boats, grade-level students to float an egg, and below-level students to determine which is more dense: a can of Classic Coke or a can of Diet Coke. They must perform a water displacement experiment to come up with the correct answer."

A high school social studies teacher, Leon Bushe uses mock trials to differentiate instruction according to interest, task, and readiness. "Dividing his class of 30 into three groups of 10, (he) gives each a court case involving a legal concept such as *beyond reasonable doubt.* Students choose whether to be lawyers, witnesses, or defendents -- whichever they feel most comfortable with. Every student has at least two roles because each trial group also serves as the jury for another trial group. To prepare for their roles, students must complete individualized reading and writing assignments, but they all learn the basics of trial by jury. One factor ... that heightens interest is that each jury deliberates in a fishbowl environment -- that is, the rest of the class gets to observe the deliberations but may not speak or interfere."

Recognizing and Accommodating Diversity. Diversity arises from many factors: gender, ethnicity, race, socio-economic status, religion, capability, disability, interests, and so forth. Thus, every classroom is diverse to some degree. In grouping students, it is important to do so in a way that draws on the strengths of whatever diversity is present in the classroom. For example, a multi-ethnic classroom enables teachers to group students across ethnic lines to bring different perspectives to the learning activity. This allows students not only to learn about other perspectives, it can enhance critical thinking and other higher order conceptual abilities. It also can foster the type of intergroup understanding and relationships that are essential to establishing a school climate of caring and mutual respect. In this respect, of course, the entire curriculum and all instructional activities must incorporate an appreciation of diversity, and teachers must plan in ways that make appropriate accommodations for individual and group differences.

Collaborative or Team Teaching. Not only can teacher collaboration benefit students, teaming with a colleague whom you like and respect can be one of the greatest boons to the teachers involved. A good collaboration is one where colleagues mesh professionally and personally. It doesn't mean that there is agreement about everything, but there must be agreement about what constitutes good teaching and effective learning.

Collaborations can take various forms. The core of the process involves two or more teachers teaming to share the instructional load in any way they feel works. Sometimes this involves:

- Parallel Teaching – team members combine their classes and teach to their strengths. This may involve specific facets of the curriculum (e.g., one teacher covers math, another reading; they cover different aspects of science) or different students (e.g., for specific activities, they divide the students and work with those to whom they relate best).

- Complementary Teaching – one teacher takes the lead with the initial lessons and another facilitates the follow-up activity.

- Special Assistance – while one team member provides basic instruction, another focuses on those students who need special assistance (more on this in Unit D).

In all forms of teacher teaming, others are involved in the collaborative effort. Teachers deploy aides, volunteers, and designated students to help in creating small groupings for teaching and learning. And, with access to the Internet and distance learning, the nature and scope of collaborative teaching has the potential to expand in dramatic fashion.

Student Helpers. Besides the mutual benefits students get from cooperative learning groups and other informal ways they help each other, formal peer programs can be invaluable assets. Students can be taught to be peer tutors, group discussion leaders, role models, and mentors. Other useful roles include: peer buddies (to welcome, orient, and provide social support as a new student transitions into the class and school), peer conflict mediators, and much more.

Student helpers benefit their peers, themselves, and the school staff, and enhance the school's efforts to create a caring climate and a sense of community.

Clearly, when it is done appropriately, grouping has many benefits. At a fundamental level, grouping is an essential strategy in turning classrooms with large enrollments into a set of simultaneously operating small classes. Just as it is evident that we need to turn schools with large enrollments into sets of small schools, we must do the same in the classroom everyday.

Grouping in the bad old days!
Is this what they mean when they say: We have to get back to basics?

Stop, think, discuss

Ask several people you know what they think the term *well-structured classroom* means.

Note how their definitions differ from yours.

2) Providing Personalized Structure for Learning

In talking about classroom structure, some people seem to see it as all or nothing (i.e., the instructional activity is either structured or unstructured). Moreover, there is a tendency to equate structure simply with limit setting and social control. Indeed, there appears to be a belief among some teachers that a tight and controlling structure must prevail for students to learn. This view is caricatured by the teacher's maxim "Don't smile until Christmas!"

Such practices tend to produce vicious cycles. The teacher's emphasis on control can have a negative impact on student motivation, which makes it harder to teach and control them. This leads the teacher to push, prod, and punish. As long as a student does not value the classroom, the teacher, and the activities, the teacher is likely to believe that the student requires a great deal of control.

The view of structure as social control is particularly prevalent in responding to the problem of student misbehavior. In such cases, it is common for observers to say that the youngster needs "more structure." Sometimes the phrase used is "clearer limits and consequences," but the idea is the same. The youngster is seen as being out of control, and the need perceived by the observer is for more control.

Most teachers wish it were that easy. Obviously, it is not possible to facilitate the learning of youngsters who are out of control. Equally obvious, however, is the reality that some procedures used to control behavior also interfere with efforts to facilitate learning. A teacher cannot teach a youngster who is suspended from school, and the youngster may be less receptive to the teacher when the suspension ends.

Efforts to use external means to control behavior (e.g., isolating a student in a "time out" situation, sending the student for discipline) tend to be incompatible with developing the type of working relationship that facilitates learning. Using the term *structure* to describe extreme efforts to control behavior fails to recognize that the objective is to facilitate learning and performance, not just control behavior.

Good teaching involves a definition of structure that goes well beyond how much control a teacher has over students. As stressed by Adelman and Taylor in their work related to personalized instructions, Structure must be viewed as

> *the type of support, guidance, and direction provided the learner, and encompasses all efforts to clarify essential information – including communication of limits as necessary.*

> Structure can be *personalized* by varying it to match a learner's current motivation and capabilities with respect to a specific task and related circumstances.

The type and degree of structure offered should vary with the learner's needs at the moment. It is important to allow students to take as much responsibility as they can for identifying the types and degree of structure they require. Some activities can be pursued without help, and should be, if the learner is to attain and maintain independence. Other tasks require considerable help if learning is to occur. A personalized approach to structure enables students to take as much responsibility as they are ready for. Some students request a great amount of direction; others prefer to work autonomously. Some like lots of help on certain tasks but want to be left alone at other times. Although teachers are the single most important source of support and guidance in classrooms, aides, other students, and volunteers all can help approximate the ideal of varying structure to meet learners' needs.

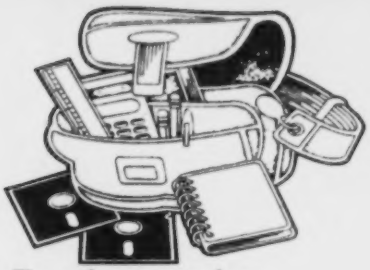
Good structure allows for active interactions between students and their environment, and these interactions are meant to lead to a relatively stable, positive, ongoing working relationship. How positive the relationship is depends on how learners perceive the communications, support, guidance, direction, and limit setting. In providing communication, it is important not only to keep students informed but also to interact in ways that consistently convey a sense of appropriate and genuine warmth, interest, concern and respect. The intent is to help students "know their own minds," make their own decisions, and at the same time feel that others like and care about them. Obviously, if the interactions are perceived negatively, motivation for classroom learning is affected and what may evolve in place of a positive working relationship is avoidance behavior.

Figuring out the best way to provide personalized structure is one of the most important problems a teacher faces in building a working relationship with a student. The problem is how to make the structure neither too controlling and dependency-producing nor too permissive. The teacher does not want to create an authoritarian atmosphere, and no teacher wants to be pushed around. Most teachers find that a positive working relationship requires mutual respect; a warm working relationship requires mutual caring and understanding.

In designing classroom structure, a teacher must plan to provide a great deal of support and guidance for students when they need it and must avoid creating a classroom climate that is experienced by students as tight and controlling. Some students – especially those who are very dependent, uninterested, or who misbehave – do need a great deal of support and guidance initially. However, it is essential to get beyond this point as soon as possible.

For instance, it is clear that when a student misbehaves, the teacher must respond immediately – but the emphasis needs to be on enhancing personalized structure rather than simply on punishment. Yes, the student has gone beyond allowable limits; there must be some logical and reasonable consequence for doing so. At the same time, the intent should be not simply to reemphasize limits (e.g., the rules) and enforce them; the intent should be to handle the situation in ways that avoid increasing student disengagement with school learning and, even better, the focus should be on enhancing engagement. This requires handling the immediate problem in the most positive and matter-of-fact way. The first step is to enhance the amount of support, guidance, and direction being provided to the student in ways that keep the focus on learning (often using a volunteer or aid to sit down immediately to engage the student). Then, as soon as feasible, the teacher confers with the student about *why* the misbehavior occurred and what needs to be done to prevent a future occurrence (including decisions about consequences now and in the future). None of this is done with rancor or condemnation. The message is: *We all make mistakes at times; we just need to find a way to make things better.* The tone is: *We can still respect and like each other and work together after we do a bit of problem solving.*

Unit D provides further discussion about responding to behavior problems.



3) Instructional Techniques

Some degree of structure is inherent in all planned activities. To enhance student engagement and guide learning and performance, teachers often want to make activities more attractive and accessible and to minimize interfering factors (factors that lead to avoidance and distraction). This is accomplished through various techniques.

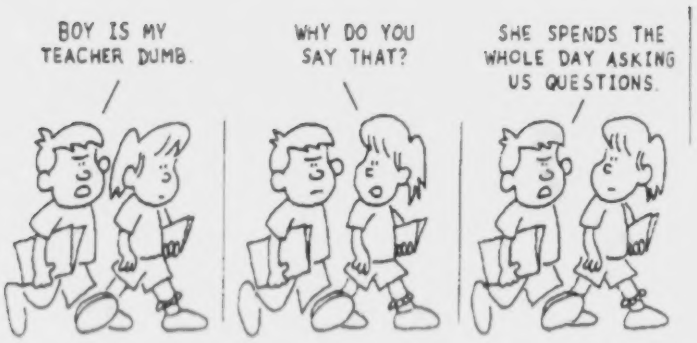
> *Techniques* alter the structure provided for an activity. The same activity can be pursued under different degrees of support and direction by varying the amount of cueing and prompting given to the learner. Some variations are "built in" at the time an activity is developed (such as special formatting in published materials); others are added as the activity is pursued.

The amount of structure offered during the pursuit of learning activities is especially important when providing support and direction to facilitate learning. Practice activities present a special concern because they often involve the type of drill that people find dull and prefer to avoid.

From a psychological perspective, techniques are intended to enhance

- motivation (attitudes, commitment, approach, follow-through),
- sensory intake (perceptual search and detection),
- processing and decision making (evaluation and selection), and
- output (practice, application, demonstration).

For our purposes here we will group them into sets of techniques to (a) enhance motivation and (b) guide performance and learning.



a) Using Techniques to Enhance Motivation

The foundation for enhancing student motivation is establishing a classroom climate that students experience as caring, supportive, and interesting – a place where they feel competent, valued, and respected. This involves

- a degree of nurturance on the part of teachers
- creating an atmosphere that encourages exploration and change
- ensuring a sense of protection related to such exploration and change.

It also involves providing support and guidance that facilitates effectiveness.

In designing learning activities, the emphasis is on creating a good "fit" or "match" between the activity and the learner (as described in the discussion of personalized instruction). From a motivational perspective, tasks must be perceived as valued and achievable.

In terms of valuing, the focus can be on what is of intrinsic or extrinsic value. However, care must be taken related to over relying on extrinsics because, in some circumstances, they can decrease intrinsic motivation. Efforts to enhance relevance (e.g., making tasks authentic, stressing personal meaning and value of specific tasks to students) are consistent with an emphasis on intrinsic motivation, as are strategies that emphasize use of novelty to stimulate curiosity.

The exhibit on the next page provides some specific examples of techniques that can be used to enhance motivation.

Exhibit

Some Techniques that Nurture, Encourage Exploration, and Protect Learners

A. *Nurturing Learning* (including positive regard, acceptance and validation of feelings, appropriate reassurance, praise, and satisfaction)

Specific examples:

- eliciting and listening to problems, goals, and progress
- making statements intended to reassure students that change is possible
- increasing the number of interpersonal, but nonauthoritarian and nonsupervisary, interactions
- increasing the frequency of positive feedback and positive public recognition
- reducing criticism, especially related to performance
- avoiding confrontations

B. *Creating an Atmosphere for exploration and change* (including encouragement and opportunity)

Specific examples:

- increasing availability of valued opportunities
- establishing and clarifying appropriate expectations and "set"
- modeling expression of affect (self-disclosing) when relevant
- encouraging pursuit of choices and preferences
- reducing demand characteristics such as expanding behavioral and time limits, reducing the amount to be done

C. *Ensuring a Sense of Protection for exploration and change* (including principles and guidelines – rights and rules – to establish "safe" conditions)

Specific examples:

- reducing exposures to negative appraisals
- providing privacy and support for "risk taking"
- making statements intended to reassure learners when risk taking is not successful
- reducing exposure to negative interactions with significant others through eliminating inappropriate competition and providing privacy
- establishing nondistracting and safe work areas
- establishing guidelines, consistency, and fairness in rule application
- advocating rights through statements and physical actions

Also important, of course, are techniques that provide support and guidance to facilitate effectiveness. Such techniques are discussed in the next section.

b) Using Techniques to Support and Guide Performance and Learning

In designing curricula and instruction, techniques are used to support and guide performance and learning by enhancing *sensory intake, processing, decision making, and output.* This is accomplished through techniques that

>stress meaning
>encourage active contact and use
>provide appropriate structure
>offer appropriate feedback.

The exhibit on the next page highlights some specifics.

The concept of *scaffolding* provides a good example of combining several techniques to guide and support student performance and learning. Kathleen Hogan and Michael Pressley describe instructional scaffolding as follows: "A teacher who stops by a student's desk to ask questions and determine her progress, and then provides hints, subtle suggestions, and guidance to move the student along, is using instructional scaffolding. Scaffolding means providing support to allow a child to think for him or herself. The more advanced partner, or scaffolder, is supportive without being overly directive. A good scaffolder looks for the point where a student can go it alone, and allows the individual to proceed on his or her own initiative." Wood, Bruner, and Ross describe scaffolding as "...controlling those elements of the task that are initially beyond the learner's capability.... As the teacher ... creates a supporting structure that can initiate and sustain interest, the students become involved. As the students gradually gain control of the task, they take over more of the responsibility. When the assumption of responsibility and control occurs, the teacher removes the scaffolding."

- Scaffolding requires the teacher to be aware of the student's current cognitive and affective state of being and their capabilities. The objective is to match learner capabilities and their current motivation.

- Scaffolding encompasses offering explanations, inviting student participation (often using a Socratic style of interaction), verifying and clarifying student understandings, modeling and coaching of thinking processes and desired behaviors, inviting students to contribute clues through use of cues and prompts, and providing feedback in ways that nurture students and encourage them to summarize what they have learned and to self-evaluate regarding progress.

Clearly, scaffolding is a tool for improving the match (enhancing "fit," working in the "zone of proximal development"), thereby enabling the teacher to personalize instruction.

All techniques to enhance motivation and guide and support learning must be used in ways that maximize a student's feelings of competence, self-determination, and connectedness and minimize threats to such feelings. This means ensuring that teachers work closely with students whenever the need is evident, encourage cooperative group learning as indicated, and allow students to pursue learning activity independently as often as it is feasible and appropriate.

Exhibit

Some Techniques that Help Guide and Support

A. *Meaning* (including personal valuing and association with previous experiences)
Specific examples:
- using stimuli of current interest and meaning
- introducing stimuli through association with meaningful materials, such as analogies and pictorial representation of verbal concepts, stressing emotional connections
- presenting novel stimuli
- participating in decision making

B. *Structure* (including amount, form, sequencing and pacing, and source of support and guidance)
Specific examples:
- presenting small amounts (discrete units) of material and/or information
- increasing vividness and distinctiveness of stimuli through physical and temporal figure-ground contrasts (patterning and sequencing), such as varying context, texture, shading, outlining, use of color
- varying levels of abstraction and complexity
- using multisensory presentation
- providing models to emulate, such as demonstrations, role models
- encouraging self-selection of stimuli
- using prompts, cues, and hints, such as color coding, directional arrows, step-by-step directions
- using verbally mediated "self"-direction ("stop, look, and listen")
- grouping material
- using formal coding and decoding strategies such as mnemonic devices, word analysis and synthesis
- rote use of specified study skill and decision-making sequences
- allowing responses to be idiosyncratic with regard to rate, style, amount, and quality
- reducing criteria for success
- using mechanical devices for display, processing, and production, such as projectors, tape recorders, and other audio visual media, typewriters, calculators, computers
- using person resources such as teachers, aides, parents, peers to aid in displaying, processing, and producing

C. *Active contact and use* (including amount, form, and sequencing, and pacing of interaction with relevant stimuli)
Specific examples:
- using immediate and frequent review
- allowing for self-pacing
- overlearning
- small increments in level of difficulty, such as in "errorless training"
- using play, games, and other personally valued opportunities for practice
- role playing and role taking
- using formal reference aids, such as dictionaries, multiplication charts
- using mechanical devices and person resources to aid in interactions

D. *Feedback* (including amount, form, sequencing and pacing, and source of information/ rewards)
Specific examples:
- providing feedback in the form of information/rewards
- immediate feedback provided related to all processes and/or outcomes or provided on a contingency basis (reinforcement schedules or need)
- peer and/or self-evaluation
- using mechanical monitoring and scoring

4) Turning Homework into Motivated Practice

Most of us have had the experience of wanting to be good at something such as playing a musical instrument or participating in a sport. What we found out was that becoming good at it meant a great deal of practice, and the practicing often was not very much fun. In the face of this fact, many of us turned to other pursuits. In some cases, individuals were compelled by their parents to labor on, and many of these sufferers grew to dislike the activity. (A few, of course, commend their parents for pushing them, but be assured these are a small minority. Ask your friends who were compelled to practice the piano.)

Becoming good at reading, mathematics, writing, and other academic pursuits requires practice outside the classroom. This, of course, is called *homework*. Properly designed, homework can benefit students. Inappropriately designed homework, however, can lead to avoidance, parent-child conflicts, teacher reproval, and student dislike of various arenas of learning. Well-designed homework involves assignments that emphasize motivated practice.

As with all learning processes that engage students, motivated practice requires designing activities that the student perceives as worthwhile and doable with an appropriate amount of effort. In effect, the intent is to personalize in-class practice and homework. This does not mean every student has a different practice activity. Teachers quickly learn what their students find engaging and can provide three or four practice options that will be effective for most students in a class.

The idea of motivated practice is not without its critics.

> *I don't doubt that students would prefer an approach to homework that emphasized motivated practice. But – that's not preparing them properly for the real world. People need to work even when it isn't fun, and most of the time work isn't fun. Also, if a person wants to be good at something, they need to practice it day in and day out, and that's not fun! In the end, won't all this emphasis on motivation spoil people so that they won't want to work unless it's personally relevant and interesting?*

We believe that a great deal of learning and practice activities can be enjoyable. But even if they are not, they can be motivating if they are viewed as worthwhile and experienced as satisfying. At the same time, we do recognize that there are many things people have to do in their lives that will not be viewed and experienced in a positive way. How we all learn to put up with such circumstances is an interesting question, but one for which psychologists have yet to find a satisfactory answer. It is doubtful, however, that people have to experience the learning and practice of basic knowledge and skills as drudgery in order to learn to tolerate boring situations.

Also in response to critics of motivated practice, there is the reality that many students do not master what they have been learning because they do not pursue the necessary practice activities. Thus, at least for such individuals, it seems essential to facilitate motivated practice.

Minimally, facilitating motivated practice requires establishing a variety of task options that are potentially challenging -- neither too easy nor too hard. However, as we have stressed, the processes by which tasks are chosen must lead to perceptions on the part of the learner that practice activities, task outcomes, or both are worthwhile -- especially as potential sources of personal satisfaction.

The examples in the following exhibit illustrate ways in which activities can be varied to provide for motivated learning and practice. Because most people have experienced a variety of reading and writing activities, the focus here is on other types of activity. Students can be encouraged to pursue such activity with classsmates and/or family members. Friends with common interests can provide positive models and support that can enhance productivity and even creativity.

Research on motivation indicates that *one of the most powerful factors keeping a person on a task is the expectation of feeling some sense of satisfaction when the task is completed.* For example, task persistence results from the expectation that one will feel smart or competent while performing the task or at least will feel that way after the skill is mastered.

Within some limits, the stronger the sense of potential outcome satisfaction, the more likely practice will be pursued even when the practice activities are rather dull. The weaker the sense of potential outcome satisfaction, the more the practice activities themselves need to be positively motivating.

Exhibit
Homework and Motivated Practice

Learning and practicing by

(1) doing

- using movement and manipulation of objects to explore a topic (e.g., using coins to learn to add and subtract)
- dramatization of events (e.g., historical, current)
- role playing and simulations (e.g., learning about democratic vs. autocratic government by trying different models in class; learning about contemporary life and finances by living on a budget)
- actual interactions (e.g., learning about human psychology through analysis of daily behavior)
- applied activities (e.g., school newspapers, film and video productions, band, sports)
- actual work experience (e.g., on-the-job learning)

(2) listening

- reading to students (e.g., to enhance their valuing of literature)
- audio media (e.g., tapes, records, and radio presentations of music, stories, events)
- listening games and activities (e.g., Simon Says; imitating rhymes, rhythms, and animal sounds)
- analyzing actual oral material (e.g., learning to detect details and ideas in advertisements or propaganda presented on radio or television, learning to identify feelings and motives underlying statements of others)

(3) looking

- directly observing experts, role models, and demonstrations
- visual media
- visual games and activities (e.g., puzzles, reproducing designs, map activities)
- analyzing actual visual material (e.g., learning to find and identify ideas observed in daily events)

(4) asking

- information gathering (e.g., investigative reporting, interviewing, and opinion sampling at school and in the community)
- brainstorming answers to current problems and puzzling questions
- inquiry learning (e.g., learning social studies and science by identifying puzzling questions, formulating hypotheses, gathering and interpreting information, generalizing answers, and raising new questions)
- question-and-answer games and activities (e.g., twenty questions, provocative and confrontational questions)
- questioning everyday events (e.g., learning about a topic by asking people about how it effects their lives)

5) Assessing Student Learning to Plan Instruction and Providing Nurturing Feedback

Assessment is used for a variety of purposes in schools. It may be used to screen and identify those who need special assistance; it may be used to help make decisions about a special placement for a student; it may be used to evaluate programs and personnel. But, from a teacher's perspective the main use is to help plan instruction and provide feedback in ways that enhance learning.

a) Planning Instruction

Different views about how to design instruction for specific learners lead to divergent assessment perspectives. For instance, concern has been raised that assessment for individualized as contrasted with personalized instruction results in an inadequate instructional design.

To clarify the point, *individualization* typically emphasizes detecting a student's deficiencies by monitoring daily performance on learning tasks and then modifying instruction to address the deficiencies. In addition, some approaches, such as dynamic assessment, attempt to assess the best teaching approach for a given child. In most cases, however, a major shortcoming of assessment guided by the concept of individualized instruction is that it overemphasizes developmental deficiencies and underemphasizes the importance of assessing motivation, especially intrinsic motivation. This is not surprising given how little systematic attention researchers and practitioners have paid to the concept of intrinsic motivation as it relates to the causes and correction of learning and behavior problems.

In contrast, the concept of *personalization* broadens the focus of assessment. Personalization can be viewed as encompassing individualization. The concept stresses the importance of designing interventions to match not only current learner capabilities but also levels of motivation, especially intrinsic motivation. This latter emphasis is seen as critical given the degree to which intrinsic motivation can profoundly affect current, as well as long-term performance and learning. Thus, a major implication of the concept of personalization for assessment is that formal and systematic procedures are needed to address motivation.

More generally, *all* formal and informal procedures used to assess and prescribe specific instructional plans (e.g., tests, observations, interviews, trial teaching) raise basic concerns. Many experts suggest that among those not doing well in school, a person's poor performance often is due to low motivation or high anxiety. When this is the case, the findings are "contaminated." Under such circumstances, it is impossible to know whether failure to demonstrate an ability or skill represents a real deficiency in a particular area of development. And, under such circumstances, it is easy to misprescribe treatment. It is easy, for example, to make the mistake of planning to teach skills that a person has already acquired – instead of helping the individual overcome psychological problems interfering with the demonstration of what she or he knows and can do.

Given teacher needs for good assessment of both current motivation and capabilities, there has been a considerable amount of effort in recent years to explore how to address these needs. In a recent article, Lorrie Shepard noted:

> *. . . a broader range of assessment tools is needed to capture important learning goals and processes and to more directly connect assessment to on going instruction. The most obvious reform has been to devise more open-ended performance tasks to ensure that students are able to reason critically, to solve complex problems, and to apply their knowledge in real-world contexts. . . . In order for assessment to play a more useful role in helping students learn it should be moved into the middle of the teaching and learning process instead of being postponed as only the end-point of instruction.*

In terms of broadening the range of tools, she stresses inclusion of observations, interviews, open discussion ("instructional conversations"), reflective journals, projects, demonstrations, collections of student work, and students' self evaluations.

Beyond tools is the matter of how assessment is pursued. In designing instruction, teachers need assessment that reflects student learning, achievement, motivation, and attitudes on instructionally-relevant classroom activities. One of the best ways to think about pursuing such assessment is to view it as an *interactive* process.

As captured by the notion of "dynamic" assessment, an interactive assessment process involves the teacher not only in reviewing products, but in clarifying, through observation and discussion, the learner's responses to specific efforts to guide and support performance and learning.

TEACHER: *Yes, Chris, what is it?*
CHRIS: *I don't want to scare you, but my Dad says if I don't get better grades someone is in for a spanking.*

As a special approach to assessing complex performance, a trend has evolved toward what is called "authentic" assessment. The focus of this trend is on performance-based evaluation using such procedures as essays, open-ended responses, responses to computer simulations, interview data, and analyses of student journals and work that is accumulated over time in a "portfolio." The information garnered from such assessments helps to design both what and how to teach as next steps in personalizing instruction.

Authentic assessment can be used to address a wide range of student outcomes. For example, it can be especially useful in assessing concerns about transfer of learning (e.g., how well a student is acquiring knowledge, skills and attitudes that they generalize across tasks, settings, and over time). To this end, observations and student reports related to daily activity can provide a wealth of data clarifying the degree to which a student is applying and adapting what has been learned (e.g., in new situations; to novel tasks; to solve problems in new and creative ways).

Authentic assessment also has potential for enhancing the sense of partnership and trust among students and teacher and for countering many of the negative aspects of other forms of evaluating student progress.

See the Exhibit on the next page for more on authentic assessment in the classroom.

Exhibit

Authentic Assessment in the Classroom

Authentic assessment (also called "performance," "appropriate," "alternative," or "direct" assessments) includes written products, solutions to problems, experiments, exhibitions, performances, portfolios of work and teacher observations, checklists and inventories, and cooperative group projects. For example: Reading among young students is readily assessed when a student reads aloud and the performance can be tape recorded for further analysis; moreover, with any student, instructional conversations and related writing activity yield data on reading comprehension and critical thinking. With respect to writing, any student's work can be gathered into a portfolio. In math, student responses to open-ended mathematics questions are used to clarify how a student thinks through a problem, thereby indicating ability to use math. For history/social studies, performance and products related to group projects provide authentic assessment data on how well concepts about history and democratic processes are being learned. Such performance and products can be analyzed in terms of strengths and weaknesses and the strategies used to learn and solve problems and judgements about learning and future instructional planning can be made with reference to subject area, student age, and prior performance.

"Authentic assessment was developed in the arts and in apprenticeship systems, where assessment has always been based on performance. It is impossible to imagine evaluating a musician's ability without hearing her sing or play an instrument, or judging a woodworker's craft without seeing the table or cabinet the student has built. It is also impossible to help a student become a better woodworker or musician unless the instructor observes the student in the process of working on something real, provides feedback, monitors the student's use of the feedback, and adjusts instruction and evaluation accordingly. Authentic assessment extends this principle of evaluating real work to all areas of the curriculum. . . .

(Authentic) assessments can be designed to closely follow the curriculum. They provide continuous, qualitative data that can be used by teachers to help instruction. They can be used by students, who can learn to assume responsibility for their portfolios and records and thereby engage in regular self analysis of their work and progress. They provide a direct measure of achievement and therefore are worth the time spent preparing for and doing them. They also encourage an intelligent, rich curriculum rather than the dumbed-down, narrow curriculum fostered by teaching to and coaching for multiple-choice tests.

From "Authentic Assessment of Educational Achievement" a FastFacts excerpted from the FAIRTEST Examiner, The National Center for Fair & Open Testing (1991).
http://www.uncg.edu/edu/ericcass/achieve/docs/auth_ass.htm

b) Providing Nurturing Feedback

As anyone who has been evaluated knows, feedback can enhance one's sense of well-being, but too often it is devastating. Relatedly, when rewards and punishment are tied to feedback they can complicate the situation greatly and in both cases can have a negative impact (e.g., too great an emphasis on extrinsic rewards and punishment can be counterproductive to maintaining and enhancing intrinsic motivation).

For these reasons, great care must be taken in developing procedures for providing students with information on their progress.

As much as is feasible, information must be provided that highlights success. Feedback, however, also should stress effectiveness in making decisions and the relationship of outcomes to the student's intrinsic reasons for learning. And, with a view to enhancing positive attitudes, it should be conveyed in ways that nurture the student's feelings about her/himself, learning, school, and the teacher.

> *Handled well, the information should contribute to students' feelings of competence, self-determination, and relatedness and should clarify directions for future progress.*

A good context for providing feedback is a formal and informal student conference. At such times, products and work samples can be analyzed; the appropriateness of current content, outcomes, processes, and structure can be reviewed; and agreements and schedules can be evaluated and revised if necessary.

Regardless of the format in which feedback is given, the emphasis should be on information clarifying progress and effectiveness; procedures that may be perceived as efforts to entice and control should be avoided. Special attention must be paid to balancing the need to maintain student motivation and feelings of well-being while providing appropriate information to improve learning. For students who tend to make many errors, this means providing support and guidance that anticipates and strives to prevent certain errors and also being selective about feedback on errors. In this last respect, it is essential to differentiate those errors that must be reviewed because they are most relevant to planning the next instructional encounter, as contrasted with errors that can be ignored at this time because it is premature to focus on them. In all this, student self-monitoring and record keeping are seen as especially helpful; close supervision and external rewards are seen as procedures to be used sparingly.

Teacher-student dialogues and group open-discussions are the easiest and most direct way to know about learners' views of the match between themselves and the program. Many students are ready to evaluate and say what's working well for them and what isn't.

Some students, of course, have yet to develop the ability to self-evaluate to a satisfactory degree; others are motivated to make excuses, to overstate how well they are doing, or to avoid discussing the matter at all. The presence of students who have trouble with self-evaluation is not a reason to return to procedures that stress close supervision and decision-making by others. Rather, the problems these students are experiencing become an important focus for intervention.

When students are not motivated to be appropriately self- evaluative and self-directive, they need opportunities to find out how personally valuable these "basic skills" can be to them. Sometimes all they need is to feel that it's safe to say what's on their minds. If they already feel safe and just haven't acquired the skills, self-monitoring and regular record keeping provide a good framework for learning such competence.

See the Exhibit on the next page for more on evaluative feedback.

I TOLD HER THE DOG ATE MY HOMEWORK. SO SHE GAVE MY DOG AN F.

Exhibit
Evaluative Feedback and Variations in Perception

Why do people arrive at different conclusions about progress and about the reasons for ongoing problems? Sometimes because they perceive events differently.

For example, social psychologists interested in the "attributions" people make about the causes of behavior have stressed that there are some systematic ways that people differ in their perceptions. Research has shown that there is a general tendency for observers to perceive the behavior of others in terms of internal dispositions or traits. "He failed the test because he's lazy (or stupid)." "She's a success because she works very hard (or because she's very smart)." Referring to the same actions, the people carrying out the behavior have a tendency to blame problems they experience on factors in the environment (e.g., poor teaching, hard tasks, bad luck) and to credit their successes to their effort or ability.

Why? Theorists suggest that sometimes it is because people are operating on the basis of different information. This is especially true when one person has information not available to the other, as is often the case for observers as contrasted to those who are actively involved in an event. For instance, when you do poorly on a test because you didn't have time to study, you may be the only one who knows the reason. Others may think it was because you didn't care to put in the time or that you have difficulty understanding the material. In this instance, the observers lack a key bit of information.

However, the different information affecting perceptions may also be due to the perceiver's level of competence and particular philosophical or political interests. That is, people often are selective in what they see because of their motivation or their capacity to understand.

In general, then, differences in evaluation of progress and problems may reflect differences in the information that is actually available to the decision makers or differences in what information they choose to notice and stress. Understanding such factors can be helpful.

Let's take an example.

> Matt wants to improve his spelling. From various options, he has chosen to learn five interesting words each day, which he will pick for himself from his experiences at school or at home. He agrees to bring a list of his five chosen words to school each day.
>
> On the first day, Matt shows up without his list. "I lost it," he explains. The next day, still no list. "We had to go visit my grandmother she's sick."
>
> Naturally, Ms. Evans, his teacher, is suspicious. She knows that many students with learning problems use elaborate excuses and blame everything but themselves for their poor performance. Her first thought is: Matt is telling tales. He really doesn't want to work on his spelling. He's lazy. Probably I should assign his spelling words.
>
> But then she thinks: Suppose he's telling the truth. And even if he isn't, what will I accomplish by accusing him of lying and by going back to procedures that I know were unsuccessful in working with him before. I must work with what he says and try to help him see that there are other ways to cope besides saying he will do something and then giving excuses for not following through.
>
> Ms. Evans tells Matt: "I want you to think about your program. If you don't want to work on spelling, that's O.K. Or if you want to choose another way to work on it, we can figure out a new way. I won't check up on what you do. When we meet, you can just let me know how you're doing and what help you want."
>
> Matt seemed greatly relieved by this. The next day he told Ms. Evans that he'd decided to find his five words at school each day, and he'd like some help in doing so.

6) Conferencing as a Key Process

The ability to talk *with* rather than *at* a student is at the core of successful teaching. Talking *with* involves a true dialogue – which, of course, depends on each participant truly listening to and hearing the other. Personalized instruction is built on a base that appreciates what a student is thinking and feeling, and carrying on an ongoing dialogue with a student offers the best opportunity to learn about such matters.

The mechanism for carrying on dialogues often is called a *conference*. However, a term such as *conference* does not convey the full sense of what is involved and at times is interpreted in ways contrary to the meaning used here.

From a motivational perspective, conferences should be nurturing experiences designed to give, share, and clarify information seen as potentially useful as teacher and student plan the next steps for learning in the classroom.

Conferences provide a time and context for

- exploring progress and problems
- clarifying and sampling options for pursuing next steps for learning and solving problems
- mutual planning and decision making
- modifying previous decisions whenever necessary.

The importance of the dialogue as a two-way process cannot be overemphasized. A conference should be a time for persons to say what they need, want, and are hoping for from each other. When problems exist, time should be devoted to problem solving. Conferences vary in length, depending first on how much time is available and second how much time is needed by a specific student. Even when a teacher can carve out 30-40 minutes for an individual conference, one conference often is insufficient for arriving at a full-blown plan and related decisions. Therefore, the process of conferencing is ongoing and not always done in a formal manner. Indeed, some of the best dialogues are spontaneous (e.g., occur when a teacher takes time to sit down next to a student during class for an informal chat). For some students, several informal chats need to occur each day backed up by a formal conference every few days. Such impromptu conferences are particularly feasible when the classroom is designed to maximize use of small group and independent learning activities.

Conferencing is especially important to enhancing student engagement in learning. Through talking with a student, a teacher has the opportunity to convey a sense of positive regard and to gain a richer understanding of the status and bases for a student's current levels of motivation and capability. For example, dialogues yield information on motivational factors (e.g., student hopes, goals, desires, interests, attitudes, preferences, expectations, concerns) which should be considered in planning ways to pursue next steps for learning and solving problems. Dialogues also provide other information about who the student is as an individual (e.g., personal and family background and/or current life events that have relevance to current behavior and learning).

Participating in conferences can enhance a student's feelings of competence, self-determination, and connectedness to the teacher. That is, properly conducted conferences convey to a student the teacher's positive regard, valuing of the student's perspective, and belief that the student should play a meaningful role in defining options and making decisions. Conferences also are one of the best contexts for providing feedback in a nurturing way and for conveying the teacher's sincere desire to help the student succeed.

With respect to scheduling conferences, each day the teacher plans to meet formally with about five individuals. The list for the day is generated as a combination of students who request a meeting and students with whom the teacher asks to meet. Sometimes the teacher may decide to hold a group conference when the focus is on matters that can benefit from a group discussion. Students are asked to sign-up for specific times and to take responsibility for preparing for and coming to the designated place for the conference.

Students can be encouraged to keep *dialogue journals* as an aid for conferencing. Usually, a dialogue journal is a bound composition book in which the student carries on a private conversation with the teacher. They write each other, often every day, in a direct and informal manner about matters of mutual concern relevant to making learning in the classroom better. This mechanism not only can facilitate communication, it provides students with practice related to basic writing and reading skills and encourages self-evaluation and critical reflection. Dialogue journals also encourage development of coherent self-expression and use of the personal voice -- aspects of writing that can be lost in formal composition writing. (At the same time, because the purpose is to encourage students to communicate, the journals should not be subjected to feedback about writing and spelling errors.)

Another variation of conferencing, particularly for secondary level, focuses on the student's full schedule of classes (rather than a given class) and uses a "conferencing teacher" for a group of students. Every teacher on the faculty is assigned a set of students (not necessarily ones they teach). They conference with these students every two weeks to review how their entire schedule is working out, review work samples (portfolios), and record progress.

Periodically, teacher-student conferences should involve parents or parent surrogates. Here, too, care must be taken to ensure true dialogues take place and that mutual sharing, planning, and decision making are intended. These conferences can take place at designated times and as needed. Because face-to face conferences are costly and difficult to arrange, phone and email exchanges need to become the rule rather than the exception. Although not always feasible, conferences with family members should include the student. Indeed, a recently introduced idea is that of student-led parent-teacher conferences.

A few guidelines for conferencing are:

- Start out on a positive note: Ask about what the student currently likes at school and in the class and clarify areas of strength. (During first conferences, ask about outside interests, hobbies, areas of success.)
- In exploring current progress, be certain to ask the student about the reasons for their successes.
- In exploring current problems, be certain to ask the student about the reasons for the problems (including what aspects they don't like about school and the class). Clarify details about these matters (e.g. Are assignments seen as too hard? Is the student embarrassed because others will think s/he does not have the ability to do assignments? Do others pick on the student? Are the assignments not seen as interesting? No support at home? Are there problems at home?)
- When necessary, use some of the time to analyze academic abilities and learning styles (e.g., listen to the student read aloud, review and discuss the work in a student's portfolio).
- Explore what the student thinks can be done to make things better (e.g., different assignments, extra support from a volunteer/peer, etc.).
- Arrive at some mutual agreements that the student values and expects to be able to do with a reasonable amount of effort.

See the Exhibit on the next page regarding student-led conferences.

Exhibit

Student-Led Parent-Teacher Conferences

The intent of student-led parent conferences is to enhance the value of such interchanges. Rather than pro forma discussions of the student's progress and/or problems, the emphasis is on creating a forum for a student to share her experiences and work at school and engage her parents and teachers in a discussion of next steps.

Ideally, the student plans, prepares, conducts and evaluates the conference. This may include writing an invitation to family members and helping to ensure the meeting site is in order. Obviously, all this requires taking time to teach the student the skills involved (including providing time for role playing practice sessions).

The roles of the teacher in such conferences varies from participating in the conference when it is the only one scheduled to rotating from conference to conference when several are scheduled at the same time.

Optimally, student-led conferences enable a student to brag a bit and to take responsibility for what s/he is doing at school. The conference can range from discussion of grades and work habits and a review of a portfolio of her work to establishing goals for the next month. Properly done, the discussion can enhance a student's ability to organize, communicate openly and honestly, engage family members in a dialogue, and self-evaluate. It can also encourage increased family attendance at conferences.

Good teaching is not easy. With respect to differentiated instruction, Patricia Woodin-Weaver states:

> *There's no question that it's a big challenge, but there's no bigger challenge than trying to insert kids in a one-size-fits-all [classroom] and then having to deal with the spillover of emotional and behavioral reactions. If kids are not in a place where they can learn, they let us know loud and clear.*

Or as one wag has put it: *"Kids would rather look bad than stupid!"*

7) Volunteers as an Invaluable Resource

As noted throughout and as summarized in the following Exhibit, volunteers can be a multifaceted resource in a classroom and throughout a school. For this to be the case, however, the school staff must value volunteers and learn how to recruit, train, nurture, and use them effectively. When implemented properly, school volunteer programs can enable teachers to individualize instruction, free teachers and other school personnel to meet students' needs more effectively, broaden students' experiences through interaction with volunteers, strengthen school-community understanding and relations, enhance home involvement, and enrich the lives of volunteers. In the classroom, volunteers can provide just the type of extra support teachers need for conferencing and working with students who require special assistance.

Volunteers may help students on a one-to-one basis or in small groups. Group interactions are especially important in enhancing a student's cooperative interactions with peers. One- to-one work is often needed to develop a positive relationship with a particularly aggressive or withdrawn student and in fostering successful task completion with a student easily distracted by peers.

Volunteers can help enhance a student's motivation and skills and, at the very least, can help counter negative effects that arise when a student has difficulty adjusting to school. They can be especially helpful working under the direction of the classroom teacher to establish a supportive relationship with students who are having trouble adjusting to school.

Volunteers Helping with Targeted Students

Every teacher has had the experience of planning a wonderful lesson and having the class disrupted by one or two unengaged students. Properly trained volunteers are a great help in minimizing such disruptions and reengaging an errant student. When a teacher has trained a volunteer to focus on designated students, the volunteer knows to watch for and move quickly at the first indication that the student needs special guidance and support. The strategy involves the volunteer going to sit next to the student and quietly trying to reengage the youngster. If necessary, the volunteer can take the student to a quiet area in the classroom and initiate another type of activity or even go out for a brief walk and talk if this is feasible. None of this is a matter of rewarding the student for bad behavior. Rather, it is a strategy for avoiding the tragedy of disrupting the whole class while the teacher reprimands the culprit and in the process increases that student's negative attitudes toward teaching and school. This use of a volunteer allows the teacher to continue teaching, and as soon as time permits, it makes it possible for the teacher to explore with the student ways to make the classroom a mutually satisfying place to be. Moreover, by handling the matter in this way, the teacher is likely to find the student more receptive to discussing things than if the usual "logical consequences" have been administered (e.g., loss of privileges, sending the student to time-out or to the assistant principal).

Exhibit

The Many Roles for Volunteers in the Classroom and Throughout the School

I. Welcoming and Social Support

A. In the Front Office
1. Greeting and welcoming
2. Providing information to those who come to the front desk
3. Escorting guests, new students/families to destinations on the campus
4. Orienting newcomers

B. Staffing a Welcoming Club
1. Connecting newly arrived parents with peer buddies
2. Helping develop orientation and other information resources for newcomers
3. Helping establish newcomer support groups

II. Working with Designated Students in the Classroom

A. Helping to orient new students

B. Engaging disinterested, distracted, and distracting students

C. Providing personal guidance and support for specific students in class to help them stay focused and engaged

III. Providing Additional Opportunities and Support in Class and on the Campus as a Whole

Helping develop and staff additional

A. Recreational activity

B. Enrichment activity

C. Tutoring

D. Mentoring

IV. Helping Enhance the Positive Climate Throughout the School -- including Assisting with "Chores"

A. Assisting with Supervision in Class and Throughout the Campus

B. Contributing to Campus "Beautification"

C. Helping to Get Materials Ready

Volunteers can be recruited from a variety of sources: parents and other family members; others in the community such as senior citizens and workers in local businesses; college students; and peers and older students at the school. *Schools committed to enhancing home and community involvement in schooling find that an effective volunteer program is an excellent element in their efforts to do so.*

To amplify a bit on a few of the functions outlined in the preceding Exhibit:

Tutoring. One of the most direct and effective ways to provide extra instructional assistance is through individual and small group tutoring. Volunteer tutors (including peer tutors and cross-age tutors) provide a way to make such assistance feasible on a large scale. Volunteers who are bi-lingual provide a special resource for student with limited English skills. They not only can help students with lessons but also can assist with development of English language skills, and can help the teacher communicate with family members. In the case of students tutoring other students, various benefits may accrue for the tutor in terms of enhanced knowledge, skills, attitudes, and behavior.

Planning and Implementing Instruction. As the teacher develops lesson plans and prepares instructional activities, volunteers can help gather resources and contribute any special knowledge and skills they have acquired. During class, they can help support and guide the work of small groups.

Social support. Throughout any school day and at critical times throughout the school year, students require social as well as academic support. Who needs social support? New students and their families; students who are shy; those who are uncertain about how to make friends; those who feel alienated; those experiencing temporary emotional upsets; those who misbehave; students making the transition to a new grade and classroom; students transitioning back from special education; and many others. Here, too, peer volunteers can be used. For example, trained "peer buddies" may commit to a buddy for several weeks -- eating lunch together, participating in various activities, and facilitating connections with other students.

Mentoring. It is well known that a good relationship with a caring adult is a fundamental ingredient in helping children succeed. In one form or another, all children need role models and advocates. Ideally, family members fulfill this role; teachers and others who work with young people can do so as well. To expand the range of role models and to ensure all youngsters do have an advocate, volunteers can be recruited as mentors. Mentoring is another tool in efforts to provide social support and a sense of future options and hope, develop positive behavior and skills, increase engagement in school and life, and reduce school dropout.

Few teachers have the time to recruit and train a cadre of volunteers. Teachers can work with the school administration and support service staff to set up a volunteer program for the school. Initially, a small group of volunteers can be recruited and taught how to implement and maintain the program (e.g., recruit a large pool of volunteers, help train them, nurture them, work with them to recruit replacements when they leave).

The cost of volunteer programs is relatively small compared to the impact they can have on school climate and the quality of life for students and school staff.

Stop, think, discuss

Write out a plan for a lesson that incorporates the strategies for facilitating motivated performance and practice that you have learned in this Unit.

If you want to read more about enabling active learning, team teaching, engaging students in conferences, authentic assessment, and celebrating diversity in the classroom, see the brief readings that have been in included in the accompanying materials.

A Few Related References*

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

American Youth Policy Forum (2000). *High Schools of the Millennium: Report of the Workgroup.*

Aregalado, R.J., Bradley, R.C. , & Lane, P.S. (1996). *Learning for Life: Creating Classrooms for Self-Directed Learning.* Thousand Oaks, CA: Corwin Press, Inc.

Banks, J.A. *An Introduction to Multicultural Education.* Boston: Allyn and Bacon, 1994.

Baruth, L. G., & Manning, M. L. *Multicultural education of children and adolescents.* Needham Heights, MA: Allyn and Bacon, 1992.

Bee, C.P. (1980). *Secondary Learning Centers: An Innovative Approach to Individualized Instruction.* Santa Monica, CA: Goodyear Publishing Company.

Brent, B. (2000). Do Classroom Volunteers Benefit Schools? *NAESP Principal Online.* http://www.naesp.org/comm/p0900d.htm.

Burke, D. (1997). Looping: Adding Time, Strengthening Relationships. *ERIC Digest.* ERIC Identifier: ED414098.

Canady, R. & Rettig, M. (2000). Block Scheduling: The Key to Quality Learning Time. *NAESP Principal Online.* http://www.naesp.org/comm/p0101c.htm

Carmen. (1990). Authentic writing assessment. *ERIC Digest.* ERIC Identifier: ED328606.

Child and Adolescent Research Consortium. (2000). *Children's Social and Emotional Competence Critical to a Good Start in the Early Years of School.* The Child Mental Health Foundations and Agencies Network.

Churton, M.W., Cranston-Gingras, A., & Blair, T.R. (1998). *Teaching Children with Diverse Abilities.* Boston, MA: Allyn & Bacon.

Cushner, K., McClelland, A., & Safford, P. (1992). *Human diversity in education: An integrative approach.* New York: McGraw Hill.

Deci, E.L. & Ryan, R.M. (1985). *Intrinsic motivation and self determination in human behavior.* New York: Plenum Press.

Desforges, C., Ed. (1995). *An Introduction to Teaching: Psychological Perspectives.* Oxford: Blackwell.

Dev, P.C. (1997). Intrinsic motivation and academic achievement: What does their relationship imply for the classroom teacher? *Remedial and Special Education, 18,* 12-19.

Educational Commission of the States (2000). *Environment as an Integrating Context for Learning (EIC).* http://www.ecs.org

Faber, A. & Mazlish, E. (1999). *How to Talk So Kids Will Listen and Listen So Kids Will Talk, 20th Edition.* Avon Paperbacks.

Goodlad, S., & Hirst, B. (1989). *Peer Tutoring: A Guide to Learning by Teaching.* London: Kogan Page & New York: Nichols Publishing.

Guthrie, J.T. & Wigfield, A. (Eds.) (1997). *Reading engagement: Motivating readers through integrated instruction.* Newark, DE: International Reading Association.

Hendrikson, L. (1984). Active learning. *ERIC Digest.* ERIC Identifier: ED253468.

Hogan, K. & Pressley, M., Eds. (1997). *Scaffolding student learning : instructional approaches and issues.* Cambridge, Mass. : Brookline Books.

Inger, M. (1993). Teacher Collaboration in Urban Secondary Schools. *ERIC Clearinghouse on Urban Education.*

Instructional Conversations. *ERIC Digests Series.* (1992). ERIC Identifier: ED347850

Katz, L.G. & Chard, S.C. (1998). Issues in Selecting Topics for Projects. *ERIC Digest.* ERIC Identifier: ED424031.

Kelly, A.V. (1978). *Mixed-Ability Grouping: Theory and Practice.* London: Harper & Row.

Kulieke, M. Bakker, J., Collins, C., Fennimore, T., Fine, C., Herman, J., Jones, B.F., Raack, L., & Tinzmann, M.B. (1990). *Why should assessment be based on a vision of learning?* NCREL, Oak Brook. http://www.ncrel.org/sdrs/areas/rpl_esys/assess.htm.

Lapp, D., Fisher, D., & Flood, J. (1999). Does It Matter how You're Grouped for Instruction? YES! Flexible Grouping Patterns Promote Student Learning. *The California Reader, V33.*

McCarthy, M.M. (1977). The how and why of learning centers. *Elementary School Journal, 77:* 292-299.

Meichenbaum, D. & Biemiller, A. (1998). *Nurturing Independent Learners: Helping Students Take Charge of Their Learning.* Boston, MA: Brookline Books.

Morrow, L.M. & Sharkey, E.A. (1993). Motivating independent reading and writing in the primary grades through social cooperative literacy expectations. *Reading Teacher, 47,* 162-165.

Oyler, C. (1996). *Making room for students: Sharing teacher authority in Room 104.* New York: Teachers College Record.

Passe, J. (1996). *When Students Choose Content: A Guide to Increasing Motivation, Autonomy, and Achievement.* Thousand Oaks, CA: Corwin Press, Inc.

Petreshene, S.S. (1978). *The Complete Guide to Learning Centers.* Palo Alto, CA: Pendragon House.

Reid, M.I., Clunies-Ross, L.R., Goacher, B., & Vile, C. (1986). *Mixed-Ability Teaching: Problems and Possibilities.* The NFER-Nelson Publishing Company Ltd.

Sapon-Shevin, Mara. (1996). Celebrating diversity, creating community: Curriculum that honors and builds on differences. In S. B. Stainback, & W.C. Stainback (Eds.), *Inclusion: A guide for educators.*. Paul H. Brookes Publishing Co: Baltimore, MD.

Sedlacek, W.E., & Kim, S.H. (2000). Multicultural Assessment. *ERIC Digest.* ERIC Identifier: ED391112.

Shiman, D.A., Culver, C.M. , & Lieberman, A., Eds. (1974). *Teachers on Individualization: The Way We Do It.* New York, CA: McGraw-Hill Book Company.

Slavin, R.E. (1994). *Cooperative learning: Theory, research, and practice* (2nd ed.). Boston: Allyn & Bacon.

Slavin, R.E., Karweit, N.L., & Madden, N.A. (Eds.) (1989). *Effective programs for students at risk.* Boston: Allyn & Bacon.

Sleeter, C.E., and Grant C.A. (1993). *Making Choices for Multicultural Education: Five Approaches to Race, Class and Gender* 2nd ed. New York: Merrill.

Stipek, D.J. (1998). *Motivation to learn: From theory to practice* (3rd ed.). Boston: Allyn & Bacon.

Student-Led Conferences Interdisciplinary Project. www.rialto.k12.ca.us/frisbie/coyote/interdisciplinary6.html

Tomlinson, C. A. (1995). *How to Differentiate Instruction in Mixed-Ability Classrooms.* Alexandria, VA: ASCD.

Tomlinson, C. A. (1999). *The Differentiated Classroom: Responding to the Needs of All Learners.* Alexandria, VA: ASCD.

Wasik, B. & Slavin, R. (1993). Preventing Early Reading Failure with One-to-One Tutoring. Reading Research Quarterly, 28 (2): 178-200.

Wehrmeyer, M. L. & Sands, D. J. (1998). *Making it Happen: Student Involvement in Education Planning, Decision Making, and Instruction.* Paul Brookes Publishing Co.

Willis, S. (1996). Managing today's classroom: Finding alternatives to control and compliance. *Education Update, 38.* http:www.ascd.org

Willis, S. & Mann, L. (Winter 2000). Differentiating instruction: Finding manageable ways to meet individual needs. *Curriculum Update: Association for Supervision and Curriculum Development.*

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

Unit D

Objectives

The intent in this Unit is to help you learn more about:

(1) *levels of special assistance* (After going over the material, be sure you can outline three levels, how they differ, and how you will incorporate special assistance into your classroom.)

(2) *why the different level of special assistance should be used in a sequential way* (After going over the material, be sure you can explain the concept of using the least intervention needed.)

Outline for Unit D

1) Levels of Special Assistance
2) Level A – Special Assistance in the Classroom to Engage and Accommodate
    a) Adding Learning Options and Individual Accommodations
    b) About Addressing Behavior Problems
3) Level B – Special Assistance in the Classroom to Develop Prerequisites
4) Level C – Special Assistance in the Classroom to Address Factors Interfering with Learning
    a) Classroom Instruction at Level C
    b) A Note About Inclusion
5) Sequencing Special Assistance
6) Referral When Necessary

One teacher recounts this experience with a new sixth grader:

I have a note for you from my old teacher.
It's not on paper though; it's in my head.
She wanted me to tell you
how lucky you are to have me in class!

Unit D

Special Classroom Assistance to Engage, Guide, and Support Those Students Who Need More

Many learning and behavior problems can be alleviated and others prevented through optimal use of the types of general strategies covered in Unit C.

When general strategies are not enough, it is time to move on to approaches that provide a student with special classroom assistance. Such assistance often is just an extension of general strategies; sometimes something more is called for. In either case, the process objectives are the same -- to improve the match between the program and a learner's current levels of motivation and capability.

The capability of providing effective special assistance in the classroom is the key to reducing the number of students who are retained and/or referred to special education.* Effective special assistance in the classroom also can help reduce misbehavior, suspensions, expulsions, and dropouts.

*Students labeled as having Learning Disabilities (LD) are the biggest single group in special education across the country. (Over half of all students in special education are categorized as LD.) The vast majority of those currently so-labeled are commonplace learning problems who probably would not have been referred to special education if special assistance in the regular classroom had been provided at the first indications of problems.

Perhaps the major factor differentiating special classroom assistance from regular teaching is the need for a teacher to find ways to establish an appropriate match for learners who are having problems. Often, a great deal of the process is a matter of trial and appraisal.

Thus, all those available to work with the youngster in the classroom (e.g., the teacher, an aide, a volunteer, a resource teacher) must take the time to develop an understanding of any student who is not learning well (e.g., strengths, weaknesses -- including missing prerequisites and interfering behaviors and attitudes, limitations, likes, dislikes). This is not a matter of requesting formal assessment (e.g., testing).

Before requesting such assessment, extensive efforts must be made to ensure the student is mobilized to learn and that instruction is appropriately designed to accommodate the learner's capabilities. Accomplishing this requires access to, control over, and willingness to use a wide range of learning options and accommodations. And, it may be necessary to reduce levels of abstraction, intensify the way stimuli are presented and acted upon, and increase the amount and consistency of guidance and support -- including added reliance on other resources.

Who Needs Special Assistance?

- The first criteria for offering special assistance is the straightforward fact of disinterest (e.g., lack of engagement). Such a finding indicates a motivational problem.

- Other students who appear generally engaged in learning at school may also become candidates for special assistance whenever they are not performing up to standards in a particular instructional area. Given that a student is mobilized to learn and instruction is appropriately designed to accommodate the learner's capabilities, there is little difficulty identifying those students who are extremely poor learners. They try but learn little, retain less, and are clearly in need of special help by anyone's standards and criteria.

- Finally, those students who appear engaged but are not learning as well as *most* others in the classroom clearly require special assistance.

Given these criteria, most teacher's have little problem identifying a student who needs special assistance. The teacher's primary concerns are determining what type of assistance to provide and how to provide it.

Stop, think, discuss

Here is what a student wrote in class one day.

I am 13 years old and learning disabled. I have had problems along time. People say I am smart but I lak eng ability and I am tired of trying. My parrents tryed to help me, but I dont deserve there support or concern, I am just not worth it. If I do not get allong with people eneywhere and never have been able to. I am affraid of everyone and hate being told to wake up or come out of my dreemworld. I dont know how to deel with eneything eneywhere.

Make some notes about what do you think should be done and then discuss your ideas with your study group.

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1) Levels of Special Assistance

As outlined in Module I, special assistance to facilitate learning can be applied at any of three levels:

Level A – age-appropriate life tasks (basic knowledge, skills, and interests)

Level B – missing prerequisites needed to function at Level A

Level C – factors interfering with learning

Age-appropriate life tasks. Current life tasks involve a variety of basic knowledge, skills, and interests as part of day-by-day living at school, home, and on the job. These include reading (see Exhibit on the next page), writing, interpersonal and intrapersonal problem solving, and so forth. At this level, special assistance essentially involves reteaching and accommodations – but not with the same approach that has just failed. Alternative ways must be used to present material the student has had difficulty learning. This is accomplished by further modifying things in ways likely to improve the match with the learner's current levels of motivation and development.

Prerequisites. At this level, the focus is essentially on identifying missing prerequisites and teaching them. The types of prerequisites that may not have been learned are outlined in a Exhibit later in this unit. The procedures used are the same as those already described for facilitating learning related to current life tasks.

Interfering factors. At this level, the possibility of intractable external barriers to learning and faulty learning mechanisms must be faced. A variety of underlying problems have been suggested as interfering with learning (see Reading __). Specialized approaches have been designed to overcome such deficiencies by directly correcting the problems or indirectly compensating for them.

First things first – but not necessarily in that order!
Quip from the Washington Post

Exhibit

Special Assistance for Reading Problems

What does the research literature say about reading? A synthesis suggests that in the early stages of regular reading instruction the emphasis should be on teaching skills for word recognition and decoding (phonics), connecting spoken and written language, and reading for meaning. Moreover, children who are read to and individuals who read a good deal on their own are most likely to become good readers.

In terms of teaching materials, the emphasis is on appropriate basal texts, supplemented with story and information books. For example, Chall, Jacobs, and Baldwin state:

> *We do not recommend. . . a reading program that follows an extreme -- one that focuses only on a more highly structured reading system, with little time for reading, or one that uses only trade books, dropping explicit teaching of skills.*

Although research on computer assisted instruction has been limited, eventually, it may be possible to relegate some of the skill instruction to interactive computers. Given a comprehensive approach to regular instruction, what should be done with a student who still has problems learning? Pronouncements based on the research literature are less satisfactory in this regard. Some writers have underscored the importance of mobilizing the learner. In this regard, some have advocated use of what has been called the language experience approach or an integrated language approach. This orientation to teaching reading attempts to build on a learner's cognitive, language, and socio-cultural background.

There also is concern about how to deal with areas of vulnerability or dysfunction. It has been suggested that instruction be redesigned for such persons to build on strengths and minimize at least temporarily the impact of areas of weakness. For example, if an individual has a weak ability to make auditory perceptual discriminations, it has been argued that it may be necessary to avoid overrelying on instruction in phonetic analysis. This argument in no way denies the importance of phonological awareness and phonics skills. It simply suggests that some individuals may have to compensate for an auditory perceptual weakness by relying initially on learning more of their vocabulary through visual or multisensory means. It also suggests that overemphasizing instruction in the area of weakness may have a negative effect in terms of feelings of competence and might create a negative attitude toward reading and schooling.

2) Level A – Special Assistance in the Classroom to Engage and Accommodate Students in Age Appropriate Life Tasks

The first efforts at providing special assistance in the classroom involve intensifying personalized instruction. Given this requires a degree of trial and appraisal, the teacher must use whatever time is available for conferencing with the student to clarify the barriers that are getting in the way of the student connecting with instruction. Others who are available to work with the youngster in the classroom (e.g., an aide, a volunteer, a resource teacher, a pupil personnel specialist) can also be useful in clarifying what is wrong and what to do about it.

a) Added Learning Options and Individual Accommodations

Ultimately, special assistance at this level involves

- using additional learning options to address student interests, strengths, vulnerabilities/ weaknesses, and limitations

- initiating specific accommodations related to the learning context, processes (including increasing the amount and consistency of guidance and support) and immediate outcomes.

See the Exhibit on the next page for some guidelines related to Level A.

It's funny and poignant.

In describing anatomy, one 7th grader wrote:

> Anatomy is the human body made up of three parts, the head, the chest, and stummick. The head holds the skull and the brains if there is any. The chest holds the liver, and the stummick holds the vowels which are a, e, i, o, u, and sometimes w and y.

Exhibit
Guidelines at Level A

(1) Discuss the situation with the student and those in the home with the intent of developing a shared understanding about what's wrong and an agreed upon plan for working together to address any barriers to learning and for continuing to promote healthy development. Plan for this to be a frequent, ongoing interchange.

(2) Enhance student engagement through (a) an emphasis on learning and enrichment options that are of current greatest interest and which the student indicates (s)he wants to and can pursue and (b) a temporary deemphasis on areas that are not of high interest.

(3) Related to the above, it may be important to find ways for the student to have a special, positive status in class and/or in others arenas around the school/community. (This helps counter a negative image the student may have created among peers and negative feelings about her/himself which, in turn, helps work against a student's tendency to pursue negative behaviors.)

(4) Enhance use of aides, volunteers, peer tutors/coaches, mentors, those in the home, etc. not only to help support student efforts to learn and perform, but to enhance the student's social support network..

(5) Explore with colleagues other ideas for special assistance in the classroom.

(6) After trying all the above, add some tutoring designed to enhance student engagement in learning and to facilitate learning of specific academic and social skills that are seen as barriers to effective classroom performance and learning.

(7) After trying all the above, refer for special mental health and/or social services.

A note about adding learning options. As indicated in Unit B, every teacher knows a classroom program has to have variety. There are important differences among students with regard to the topics and procedures that currently interest and bore them. And for some students, more variety seems necessary than for others, especially for those with low motivation for or negative attitudes about school. For these individuals, few currently available options may be appealing. How much greater the range of options needs to be depends primarily on how strong avoidance tendencies are. The difficulty is determining what will engage them. Remember that, in general, the initial strategies for working with such students involve

- dialoguing with the student to identify a range of learning options that the student perceives as of considerable personal value and as attainable with an appropriate amount of effort; (If necessary, this includes alternatives to established curriculum content and processes.)

- primarily emphasizing areas in which the student has made personal and active decisions.

A note about learner decision making. At this level, it is imperative to involve the student in making decisions from valued options. By fostering student perceptions of real choice (e.g., being in control of one's destiny, being self-determining), the teacher may be able to counter perceptions of coercion and control. This is an important key to reducing reactance and enhancing engagement in classroom learning.

> It is worth reiterating a point made in Unit B. At this level, some students are making a fundamental decision about whether they want to participate or not. Before some students will decide to participate in a proactive way, they have to perceive the learning environment as positively different -- and quite a bit so -- from the one in which they had so much failure. (That is why it may be necessary in specific cases *temporarily* to put aside established options and standards.)

A few examples of accommodations. At this level, it is imperative to accommodate a wider range of behavior than usually is tolerated (e.g., making changes in the environment to account for a youngster who is very active and/or distractable; widening limits so that certain behaviors are not an infringement of the rules).

> For some students, you probably will have to relax behavioral expectations and standards somewhat, while you try to modify their working environment and develop specific strategies to facilitate their performance and learning.

A few examples of accommodative strategies follow -- all of which assume the student is involved with activities s/he values and believes are attainable with appropriate effort.

If a student seems easily distracted, you might

- identify any specific environmental factors that distract the student and make appropriate environmental changes
- have the student work with a group that is highly task-focused
- let the student work in a study carrel or in a space that is "private" and uncluttered
- designate a volunteer to help the student whenever s/he becomes distracted and/or starts to misbehave, and if necessary, to help the student make transitions
- allow for frequent "breaks"
- interact with the student in ways that will minimize confusion and distractions (e.g., keep conversations relatively short; talk quietly and slowly; use concrete terms; express warmth and nurturance)

If a student needs more direction, you might

- develop and provide sets of specific prompts, multisensory cues, steps, etc. using oral, written, and perhaps pictorial and color-coded guides as organizational aids related to specific learning activities, materials, and daily schedules
- ensure someone checks with the student frequently throughout an activity to provide additional support and guidance in concrete ways (e.g., model, demonstrate, coach)
- support student's efforts related to self-monitoring and self-evaluation and provide nurturing feedback keyed to the student's progress and next steps

If the student has difficulty finishing tasks as scheduled, you might

- modify the length and time demands of assignments and tests
- modify the nature of the process and products (e.g., allow use of technological tools and allow for oral, audio-visual, arts and crafts, graphic, and computer generated products)

b) About Addressing Behavior Problems

Because of the frequency with which a student may be misbehaving, teachers often feel they must deal with the behavior problem before they can work on the matters of engagement and accommodation. Therefore, let's take a close look at this matter.

As discussed in Unit C, in their effort to deal with deviant and devious behavior and create safe environments, teachers and other school staff increasingly have adopted social control practices. These include some *discipline* and *classroom management* practices that often model behavior that fosters (rather than counters) development of negative values.

To move beyond overreliance on punishment and social control strategies, there is ongoing advocacy for *social skills training* and new agendas for *emotional "intelligence" training* and *character education*. Relatedly, there are calls for greater home involvement, with emphasis on enhanced parent responsibility for their children's behavior and learning.

More comprehensively, there are efforts to transform classrooms and schools through creation of an atmosphere of "caring," "cooperative learning," and a "sense of community." This agenda allows for a holistic and family-centered orientation, with curricula that enhances personal responsibility (social and moral), integrity, self-regulation (self-discipline), a work ethic, diverse talents, and positive feelings about self and others

Discipline in the classroom. Misbehavior disrupts; it may be hurtful; it may disinhibit others. When a student misbehaves, a natural reaction is to want that youngster to experience and other students to see the consequences of misbehaving. One hope is that public awareness of consequences will deter subsequent problems. As a result, the primary intervention focus in schools usually is on *discipline* -- sometimes embedded in the broader concept of *classroom management*.

See the Exhibit on the following page for an overview of prevailing discipline practices.

Exhibit

Defining and Categorizing Discipline Practices

The two mandates that shape much of current practice are: (1) schools must teach self-discipline to students; and (2) teachers must learn to use disciplinary practices effectively to deal with misbehavior.

Knoff offers three definitions of discipline as applied in schools:

> "(a) ... punitive intervention; (b) ... a means of suppressing or eliminating inappropriate behavior, of teaching or reinforcing appropriate behavior, and of redirecting potentially inappropriate behavior toward acceptable ends; and (c) ... a process of self-control whereby the (potentially) misbehaving student applies techniques that interrupt inappropriate behavior, and that replace it with acceptable behavior". In contrast to the first definition which specifies discipline as punishment, Knoff sees the other two as nonpunitive or as he calls them "positive, best-practices approaches."

Hyman, Flannagan, & Smith categorize models shaping disciplinary practices into 5 groups: psychodynamic-interpersonal models, behavioral models, sociological models, eclectic-ecological models, and human-potential models

Wolfgang & Glickman group disciplinary practices in terms of a process-oriented framework:

- relationship-listening models (e.g., Gordon's Teacher Effectiveness Training, values clarification approaches, transactional analysis)
- confronting-contracting models (e.g., Dreikurs' approach, Glasser's Reality Therapy)
- rules/rewards-punishment (e.g., Canter's Assertive Discipline)

Bear offers 3 categories in terms of the goals of the practice -- with a secondary nod to processes, strategies and techniques used to reach the goals:

- preventive discipline models (e.g., models that stress classroom management, prosocial behavior, moral/character education, social problem solving, peer mediation, affective education and communication models)
- corrective models (e.g., behavior management, Reality Therapy)
- treatment models (e.g., social skills training, aggression replacement training, parent management training, family therapy, behavior therapy)

Unfortunately, too many people see punishment as the only recourse in dealing with misbehavior. They use the most potent negative consequences available to them in a desperate effort to control an individual and make it clear to others that acting in such a fashion is not tolerated.

(It is worth noting that a large literature points to the negative impact of various forms of parental discipline on internalization of values and of early harsh discipline on child aggression and formation of a maladaptive social information processing style. And a significant correlation has been found between corporeal punishment of adolescents and depression, suicide, alcohol abuse, and wife-beating.)

In schools, short of suspending the individual, punishment essentially takes the form of a decision to do something to the student that he or she does not want done. In addition, a demand for future compliance usually is made, along with threats of harsher punishment if compliance is not forthcoming. And the discipline may be administered in ways that suggest the student is seen as an undesirable person. As students get older, suspension increasingly comes into play. Indeed, suspension remains one of the most common disciplinary responses for the transgressions of secondary students.

As with many emergency procedures, the benefits of using punishment may be offset by many negative consequences. These include increased negative attitudes toward school and school personnel which often lead to behavior problems, anti-social acts, and various mental health problems. Disciplinary procedures also are associated with dropping out of school. It is not surprising, then, that some concerned professionals refer to extreme disciplinary practices as "pushout" strategies.

Most school guidelines for managing misbehavior stress that discipline should be reasonable, fair, and nondenigrating (e.g., should be experienced by recipients as legitimate reactions that neither denigrate one's sense of worth nor reduce one's sense of autonomy). With this in mind, classroom management practices usually emphasize establishing and administering *logical consequences*. Such an idea is generalized from situations where there are naturally-occurring consequences (e.g., you touch a hot stove; you get burned).

See the Exhibit on the following page for more on the topic of logical consequences.

Exhibit

About Logical Consequences

In classrooms, there may be little ambiguity about the rules; unfortunately, the same often cannot be said about "logical" penalties. Even when the consequence for a particular rule infraction has been specified ahead of time, its logic may be more in the mind of the teacher than in the eyes of the students. In the recipient's view, any act of discipline may be experienced as punitive – unreasonable, unfair, denigrating, disempowering.

Basically, consequences involve depriving students of things they want and/or making them experience something they don't want. Consequences take the form of (a) removal/deprivation (e.g., loss of privileges, removal from an activity), (b) reprimands (e.g., public censure), (c) reparations (e.g., to compensate for losses caused by misbehavior), and (d) recantations (e.g., apologies, plans for avoiding future problems). For instance, teachers commonly deal with acting out behavior by removing a student from an activity. To the teacher, this step (often described as "time out") may be a logical way to stop the student from disrupting others by isolating him or her, or the logic may be that the student needs a cooling off period. It may be reasoned that (a) by misbehaving the student has shown s/he does not deserve the privilege of participating (assuming the student likes the activity) and (b) the loss will lead to improved behavior in order to avoid future deprivation.

Most teachers have little difficulty explaining their reasons for using a consequence. However, if the intent really is to have students perceive consequences as logical and nondebilitating, it seems logical to determine whether the recipient sees the discipline as a legitimate response to misbehavior. Moreover, it is well to recognize the difficulty of administering consequences in a way that minimizes the negative impact on a student's perceptions of self. Although the intent is to stress that it is the misbehavior and its impact that are bad, the student can too easily experience the process as a characterization of her or him as a bad person.

Organized sports such as youth basketball and soccer offer a prototype of an established and accepted set of consequences administered with recipient's perceptions given major consideration. In these arenas, the referee is able to use the rules and related criteria to identify inappropriate acts and apply penalties; moreover, s/he is expected to do so with positive concern for maintaining the youngster's dignity and engendering respect for all.

If discipline is to be perceived as a logical consequence, steps must be taken to convey that a response is not a personally motivated act of power (e.g., an authoritarian action) and, indeed, is a rational and socially agreed upon reaction. Also, if the intent is long-term reduction in future misbehavior, it may be necessary to take time to help students learn right from wrong, to respect others rights, and to accept responsibility.

From a motivational perspective, it is essential that logical consequences are based on understanding of a student's perceptions and are used in ways that minimize negative repercussions. To these ends, motivation theorists suggest (a) establishing a publicly accepted set of consequences to increase the likelihood they are experienced as socially just (e.g., reasonable, firm but fair) and (b) administering such consequences in ways that allow students to maintain a sense of integrity, dignity, and autonomy. These ends are best achieved under conditions where students are "empowered" (e.g., are involved in deciding how to make improvements and avoid future misbehavior and have opportunities for positive involvement and reputation building at school).

Social skills training. Suppression of undesired acts does not necessarily lead to desired behavior. It is clear that more is needed than classroom management and disciplinary practices.

Is the answer social skills training? After all, poor social skills are identified as a symptom (a correlate) and contributing factor in a wide range of educational, psychosocial, and mental health problems.

Programs to improve social skills and interpersonal problem solving are described as having promise both for prevention and correction. However, reviewers tend to be cautiously optimistic because studies to date have found the range of skills acquired are quite limited and generalizability and maintenance of outcomes are poor. This is the case for training of specific skills (e.g., what to say and do in a specific situation), general strategies (e.g., how to generate a wider range of interpersonal problem-solving options), as well as efforts to develop cognitive-affective orientations (e.g., empathy training). Conclusions based on reviews of social skills training over the past two decades are that individual studies show effectiveness, but outcomes continue to lack generalizability and social validity. (While their focus is on social skills training for students with emotional and behavior disorders, their conclusions hold for most populations.)*

Specific discipline practices ignore the broader picture that every classroom teacher must keep in mind.

> *The immediate objective of stopping misbehavior must be accomplished in ways that maximize the likelihood that the teacher can engage/reengage the student in instruction and positive learning.*

From a prevention viewpoint, there is widespread awareness that program improvements can reduce behavior (and learning) problems significantly. It also is recognized that the application of consequences is an insufficient step in preventing future misbehavior.

Therefore, as outlined in the Exhibit on the next page, interventions for misbehavior should be conceived in terms of:

- efforts to prevent and anticipate misbehavior
- actions to be taken during misbehavior
- steps to be taken afterwards.

*For specific information on curriculum content areas for fostering social and emotional development, see Collaborative to Advance Social and Emotional Learning (CASEL) www.casel.org

Exhibit
Intervention Focus in Dealing with Misbehavior

I. Preventing Misbehavior

A. Expand Social Programs

1. Increase economic opportunity for low income groups
2. Augment health and safety prevention and maintenance (encompassing parent education and direct child services)
3. Extend quality day care and early education

B. Improve Schooling

1. Personalize classroom instruction (e.g., accommodating a wide range of motivational and developmental differences
2. Provide status opportunities for nonpopular students (e.g., special roles as assistants and tutors)
3. Identify and remedy skill deficiencies early

C. Follow-up All Occurrences of Misbehavior to Remedy Causes

1. Identify underlying motivation for misbehavior
2. For unintentional misbehavior, strengthen coping skills (e.g., social skills, problem solving strategies)
3. If misbehavior is intentional but reactive, work to eliminate conditions that produce reactions (e.g., conditions that make the student feel incompetent, controlled, or unrelated to significant others)
4. For proactive misbehavior, offer appropriate and attractive alternative ways the student can pursue a sense of competence, control, and relatedness
5. Equip the individual with acceptable steps to take instead of misbehaving (e.g., options to withdraw from a situation or to try relaxation techniques)
6. Enhance the individual's motivation and skills for overcoming behavior problems (including altering negative attitudes toward school)

II. Anticipating Misbehavior

A. Personalize Classroom Structure for High Risk Students

1. Identify underlying motivation for misbehavior
2. Design curricula to consist primarily of activities that are a good match with the identified individual's intrinsic motivation and developmental capability
3. Provide extra support and direction so the identified individual can cope with difficult situations (including steps that can be taken instead of misbehaving)

B. Develop Consequences for Misbehavior that are Perceived by Students as Logical (i.e., that are perceived by the student as reasonable fair, and nondenigrating reactions which do not reduce one' sense of autonomy)

III. During Misbehavior

A. Try to base response on understanding of underlying motivation (if uncertain, start with assumption the misbehavior is unintentional)

B. Reestablish a calm and safe atmosphere

1. Use understanding of student's underlying motivation for misbehaving to clarify what occurred (if feasible involve participants in discussion of events)
2. Validate each participant's perspective and feelings
3. Indicate how the matter will be resolved emphasizing use of previously agreed upon logical consequences that have been personalized in keeping with understanding of underlying motivation
4. If the misbehavior continues, revert to a firm but nonauthoritarian statement
5. As a last resort use crises back-up resources
   a. If appropriate, ask student's classroom friends to help
   b. Call for help from identified back-up personnel
6. Throughout the process, keep others calm by dealing with the situation with a calm and protective demeanor

IV. After Misbehavior

A. Implement Discipline -- Logical Consequences/ Punishment

1. Objectives in using consequences
   a. Deprive student of something s/he wants
   b. Make student experience something s/he doesn't want
2. Forms of consequences
   a. Removal/deprivation (e.g., loss of privileges, removal from activity)
   b. Reprimands (e.g., public censure)
   c. Reparations (e.g., of damaged or stolen property)
   d. Recantations (e.g., apologies, plans for avoiding future problems)

B. Discuss the Problem with Parents

1. Explain how they can avoid exacerbating the problem
2. Mobilize them to work preventively with school

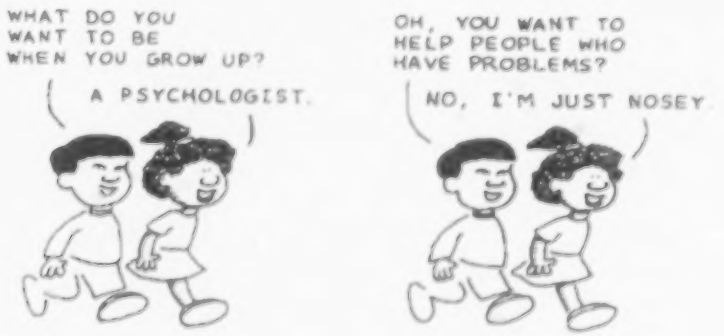
C. Work Toward Prevention of Further Occurrences (see I & II)

About addressing underlying motivation. Beyond discipline and skills training is a need to address the roots of misbehavior, especially the underlying motivational bases for such behavior. Consider students who spend most of the day trying to avoid all or part of the instructional program. An intrinsic motivational interpretation of the avoidance behavior of many of these youngsters is that it reflects their perception that school is not a place where they experience a sense of competence, autonomy, and or relatedness to others. Over time, these perceptions develop into strong motivational dispositions and related patterns of misbehavior.

Misbehavior can reflect proactive (approach) or reactive (avoidance) motivation.

Noncooperative, disruptive, and aggressive behavior patterns that are *proactive* tend to be rewarding and satisfying to an individual because the behavior itself is exciting or because the behavior leads to desired outcomes (e.g., peer recognition, feelings of competence or autonomy). Intentional negative behavior stemming from such approach motivation can be viewed as pursuit of deviance.

Misbehavior in the classroom often also is *reactive*, stemming from avoidance motivation. This behavior can be viewed as protective reactions. Students with learning problems can be seen as motivated to avoid and to protest against being forced into situations in which they cannot cope effectively. For such students, many teaching and therapy situations are perceived in this way. Under such circumstances, individuals can be expected to react by trying to protect themselves from the unpleasant thoughts and feelings that the situations stimulate (e.g., feelings of incompetence, loss of autonomy, negative relationships). In effect, the misbehavior reflects efforts to cope and defend against aversive experiences. The actions may be direct or indirect and include defiance, physical and psychological withdrawal, and diversionary tactics.



Interventions for reactive and proactive behavior problems begin with major program changes.

From a motivational perspective, the aims are to (a) prevent and overcome negative attitudes toward school and learning, (b) enhance motivational readiness for learning and overcoming problems,(c) maintain intrinsic motivation throughout learning and problem solving, and (d) nurture the type of continuing motivation that results in students engaging in activities away from school that foster maintenance, generalization, and expansion of learning and problem solving.

Failure to attend to motivational concerns in a comprehensive, normative way results in approaching passive and often hostile students with practices that instigate and exacerbate problems.

After making broad programmatic changes to the degree feasible, intervention with a misbehaving student involves remedial steps directed at underlying factors. For instance, with intrinsic motivation in mind, the following assessment questions arise:

- Is the misbehavior unintentional or intentional?
- If it is intentional, is it reactive or proactive?
- If the misbehavior is reactive, is it a reaction to threats to self-determination, competence, or relatedness?
- If it is proactive, are there other interests that might successfully compete with satisfaction derived from deviant behavior?

In general, intrinsic motivational theory suggests that corrective interventions for those misbehaving reactively requires steps designed to reduce reactance and enhance positive motivation for participating in an intervention. For youngsters highly motivated to pursue deviance (e.g., those who proactively engage in criminal acts), even more is needed. Intervention might focus on helping these youngsters identify and follow through on a range of valued, socially appropriate alternatives to deviant activity. Such alternatives must be capable of producing greater feelings of self-determination, competence, and relatedness than usually result from the youngster's deviant actions. To these ends, motivational analyses of the problem can point to corrective steps for implementation by teachers, clinicians, parents, or students themselves.

3) Level B – Special Assistance in the Classroom to Develop Prerequisites

Some students may not have acquired certain "readiness" skills or attitudes that are prerequisites for effectively learning to read, do math, understand science, and so forth. An individual who has not learned to order and sequence events, follow learning directions, and so forth will need to develop such skills before he or she is likely to be successful in learning to read and do math.

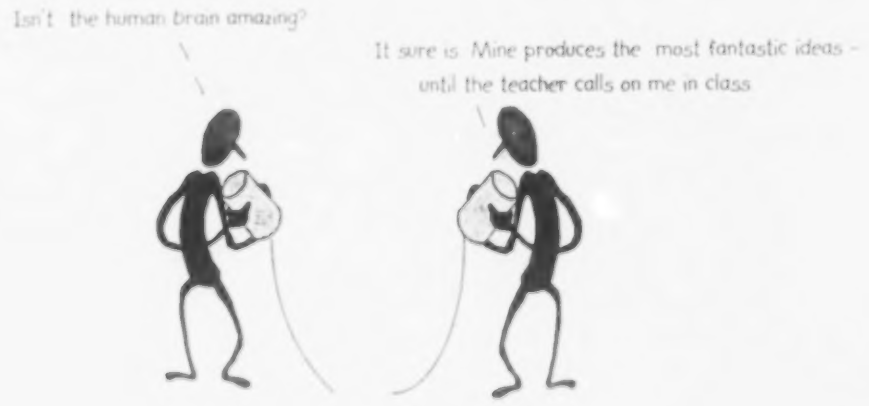
Similarly, if the student doesn't see much point in learning the three Rs or other school subjects, development of such interests must be engendered. This prerequisite can be called motivational readiness.

> *Readiness should not be viewed in the old sense of waiting until an individual develops readiness. Rather, it must be approached as a matter of assisting the student to acquire essential prerequisite skills and attitudes.*

The Exhibit on the following page outlines a set of prerequisites relevant to the process of teaching basic academics.

> *Special assistance at this level remains necessary only for the time required to facilitate acquisition of specific prerequisites once they are identified as missing.*

On another level, overcoming factors interfering with learning often also are prerequisites to engaging students in positive classroom learning and enhancing their progress. We turn to this topic next.



Exhibit

Prerequisites

In general, individuals should have the following important prerequisites if they are to benefit appropriately from instruction in the three Rs.

Language

1. Expressive – working vocabulary and ability to speak clearly and plainly enough to be understood
2. Receptive – ability to understand what is said
3. Use – ability to use at least simple sentences and to express ideas, thoughts, and feelings; understanding of the relationship between spoken and written language

Perception

1. Visual discrimination – ability to discriminate differences and similarities in letters, words, numbers, and colors and to see the relationship of a part to a whole
2. Auditory discrimination -- ability to discriminate differences and similarities in sounds of letters

Cognition and Motivation (including attentional, memory, and conceptual skills)

1. Interest in what is being taught
2. Ability and desire to follow simple directions
3. Ability and desire to stay at one's desk for sufficient periods of time to complete a simple classroom task
4. Ability and desire to remember simple facts
5. Ability and desire to answer questions about a simple story
6. Ability and desire to tell a story from a picture (i.e., associate symbols with pictures, objects, and facts)
7. Ability and desire to stay focused on material (pictures, letters, words) presented to the class by the teacher
8. Ability and desire to solve simple task oriented problems
9. Ability and desire to tolerate failure sufficiently to persist on a task
10. Ability and desire to make transitions from one activity to another
11. Ability and desire to carry on with a task over several days
12. Ability and desire to accept adult direction without objection or resentment
13. Ability and desire to work without constant supervision or reminders
14. Ability and desire to respond to normal classroom routines
15. Ability and desire to suppress tendencies to interrupt others

Exhibit

Being Just and Fair

In responding to misbehavior, teachers must be just and fair! But what does that mean? Fair to whom? Fair according to whom? Fair using what criteria and procedures? What is fair for one person may cause an inequity for another.

Should a teacher treat everyone the same? Should a teacher respond in ways that consider cultural and individual differences and needs? Should past performance be a consideration?

When all students are seen as having similar backgrounds and capabilities, the tendency is to argue that an egalitarian principles of distributive justice should guide efforts to be fair. However, when there are significant disparities in background and capability, different principles may apply. Students who come from a different culture, students who have significant emotional and/or learning problems, young vs. older students, students who have a history of good behavior -- all suggest that fairness involves consideration of individual differences, special needs, and specific circumstances. Sometimes fairness demands that two students who break the same rule should be handled differently. To do otherwise with a student who has significant learning, behavior, and emotional problems may result in worsening the student's problems and eventually "pushing" the student out of school. This clearly is an unjust and unfair long-term outcome for the student. Thus, if our aim is to *help* all students have an equal opportunity to succeed at school, then it is essential not to fall into the trap of creating the all-too-simple *socialization* solution of a "no exceptions" and "zero tolerance" approach to rule enforcement. Society has an obligation to do more than exert its power to control and punish; it must continue to balance socialization interventions with special interventions that are designed to help individuals in need. Unfortunately, there are times when a teacher's role in socializing the young comes into conflict with her or his role to help those students who have problems.

In adopting a broad set of principles to guide efforts to be fair, the opportunity arises and must be taken to teach all students why there are exceptions. A caring school community teaches by example and by ensuring the principles that are being modeled are well-understood. The teachers in a caring school don't just exercise social control and provide social skills (or socialization) training for students who have problems, they integrate a comprehensive focus on promoting healthy social and emotional development in all their interactions with every student.

4) Level C – Special Assistance in the Classroom to Address Factors Interfering with Learning

Some students cannot benefit from ongoing instruction unless barriers that interfere with classroom learning and performance are addressed effectively. Of concern are both external and internal barriers. The former consist of community, family, school, and peer factors. Internally, a teacher's concern is with three types of interfering factors -- disabilities, negative motivation, and interfering behaviors. It is well to remember that relatively few individuals have internal learning mechanisms that are not functioning effectively (e.g., only a small percentage of students have true learning disabilities).

If an individual has trouble learning skills in a personalized learning environment even after special assistance has been given to engage the youngster and after missing prerequisites are addressed, it seems reasonable to explore the possibility of interfering problems. At this level of intervention, the focus shifts to more intensive special assistance (e.g., clinical remediation, psychotherapy and behavior change strategies, and/or social services) designed to help the individual overcome whatever is interfering with learning. Given the complexity of addressing this level of problem, we only deal with it superficially here. After you are adept at implementing Level A and B strategies, you will be ready to go into more detail related to Level C.

Basically, efforts to deal with interfering factors involve

- direct actions to address major barriers (external/internal) to learning
- helping students strengthen themselves in areas where they have weaknesses or vulnerabilities
- helping students learn ways to compensate, as necessary, when confronted with barriers or areas of weaknesses.

For teachers, direct action at this level encompasses mainly continuing a process of trial and appraisal to find the best way to teach the student and to work with others (e.g., family members, peers) to counsel them away from actions that interfere with the student's progress and guide them to ways they can assist the student.

A focus on compensatory approaches involves both concern for enhancing the student's (and family's) motivation for addressing barriers and teaching them specific strategies for going around those that can't be overcome.

a) Classroom Instruction at Level C

At this level, in addition to direct and systematic teaching and behavior management, instructional strategies may draw on psychotherapeutic principles and a variety of teaching models. Intervention emphasizes rapport building to reduce anxiety and increase positive involvement, traditional learning principles (e.g., mastery learning, reinforcement theory), contemporary views of cognitive strategy instruction and general learning strategies (e.g., metacognitive approaches for "how to" learn and remember), use of multisensory approaches, greater use of specific techniques to enhance engagement and guide and support learning, greater emphasis on social interaction, and so forth.

At this level, experienced practitioners often pursue "clinical teaching." This day-by-day process involves (1) assessment to provide information for planning the day's work, (2) formulation of the day's plan, (3) carrying it out, and (4) evaluating the effects (positive and negative). Evaluation findings are supplemented with additional assessment if necessary, and these data provide much of the bases for planning the next session. Over time, teachers using this cycle acquire an appreciation of what is likely to work or will not work with a specific individual.

In all this, technology can help. For example, computers are a major compensatory tool for many students (e.g., using a keyboard to write compensates for poor handwriting, which is especially important for students with poor fine motor abilities; various software programs help compensate for poor language skills).

The concept of "looping" is another way to enhance teacher and student opportunities to work together in addressing learning, behavior, and emotional problems. Looping involves moving the teacher with students from one grade to the next for one or more years. Both academic and social benefits have been reported for this practice. Not only are there achievement gains for students, the practice enables schools to provide more time for slower students which counters the need for retention. There also are more opportunities for bonding between teachers and students and teachers and parents.As summarized by Daniel Burke (ERIC Digest ED414098), the social benefits include:

> (a) diminished apprehension about a new school year; (b) more time to establish positive peer relationships; (c) increased support for students who require school as a social safety net; (d) an enhanced sense of school and group as a "community"; and (e) increase opportunities for shy students to develop self-confidence.
>
> The only potential disadvantage of looping regularly mentioned is an inappropriate match, or personality conflict, between teacher and student – a situation that can occur in a traditional classroom as well. Such actual problems are rare ... and can usually be solved by transferring those students to another teacher. . . . The essence of looping is the promotion of strong, extended, meaningful, positive interpersonal relationships between teachers and students that foster increased student motivation and, in turn, stimulate improved learning outcomes for students.

b) A Note About Inclusion

Special classrooms tend to segregate "handicapped" persons from others. For this reason, the law in the U.S.A. requires placement in the "least restrictive environment" of all students with disabilities. This is meant to ensure that they are educated in a regular environment along with students who do not have disabilities and in the school they would regularly attend – unless there is a compelling educational reason for not doing so.

The idea that such students should be educated as much as is feasible with students who do not have disabilities often is called *mainstreaming* or "inclusive education". The point is to keep these students in the mainstream of public education rather than segregate them in special classes and special institutions.

To help in applying the idea of placing individuals in the least restrictive environment, lists have been formulated describing a continuum of placements ranging from least to most restrictive. (By law in the U.S.A., schools must have a *continuum of alternative placements* for students with disabilities.) Not surprisingly, the least restrictive placement usually is described as keeping people in normal situations and using special assistance only to the degree needed. Thus, for example, a decision to place a student in a special class is viewed as somewhat more restrictive than keeping the individual in a regular class. And, a full-day placement in a special class is viewed as even more restrictive. The most restrictive placement usually is viewed as assignment to a special school or institution..

With the policy emphasis on "inclusion" in regular classes of students who are designated with special education labels, new challenges and opportunities confront the regular classroom teacher. The challenge, of course, is to change the regular classroom so that students with diverse needs are taught effectively. The opportunity is to learn from the experience of those who have special expertise in working with students with learning, behavior, and emotional problems and to use the additional resources that inclusion brings into the regular classroom (e.g., additional aides).

See the exhibit on the following page for a discussion of the benefits of teaming with a special education teacher.

Exhibit

Special Education Teacher as Team Teacher

Excerpts from: *Student Diversity and Learning Needs* by Joseph Sanacore (1997). ERIC Digest. ED412527

. . . This inclusionary perspective helps learners with mild, moderate, and severe disabilities to be successful in the heterogeneous classroom and, thus, to be genuine members of the learning community. [For example, a] . . . middle grades science teacher . . . and [a] special educator . . . describe their bonding as team teachers [as leading] to the social and academic growth of themselves and their students. Initially, the key players decided to meet at least one period each week for planning [during which] they focused on building a trusting relationship as they defined and redefined roles, discussed content to be covered, planned instructional activities, and assessed student outcomes. These and other planning agendas set the stage for continued growth with a variety of joint responsibilities (i.e., having parent conferences, managing student behavior). While reflecting on their professional growth, [they] realized successful inclusion occurs when both teachers and students receive support. Planning cooperatively, developing goals, maintaining personal accountability helped teachers merge talents, to reaffirm their commitment to all students, and to reach their audience academically and socially. As was expected, both special needs students and their nondisabled peers became contributing members of the learning community.

[In an interdisciplinary program], the learning environment for grades 9 and 10 involves 2 teams for each grade level, with approximately 85 students in each. Social studies, science, English, and special education teachers share daily blocks of time morning and afternoon, and these professionals may organize instruction in a variety of ways to accommodate students' learning needs. An important part of these efforts is collaborative planning time for content teachers and special educators. Interestingly, special needs students at [the school] do not usually require instructional modifications in their heterogeneously grouped classes; however, when support is needed for nurturing full participation, it may be provided by peers, adults, adapted resources, or assistive technology. . . .

Peer Buddies Can Promote Inclusion

by Hughes et al, *Teaching Exceptional Children* (May/June 1999)

. . . one of the most successful and often neglected [strategies to promote inclusion] is the use of peer supports – [pairing] special education students with their general education peers. Studies show that many of the interactions that have occurred between these students have gone far beyond the ... classroom and school, and have developed into friendships with shared experiences in each others homes and in the community. . . .

The Metropolitan Nashville Peer Buddy Program attempts to remove scheduleing barriers to inclusion by providing daily class times in which participating general education and special education students may interact. ... The core of the program is a credit course that teaches students about various types of disabilities and allows Peer Buddies to spend at least one period each day with their special education partners. Peer Buddies serve as positive role models and provide the support their partners need to be included within general education and vocational classes, and the extracurricular activities.... They help their partners complete class projects and communicate with their teachers, eat lunch together, help with extracurricular activities, go shopping, attend after school events, help in the classroom, and generally be a friend. They also introduce their peer to their own friends, facilitating further friendships.

(This article also discusses steps related to starting a Peer Buddy Program.) More info at: www.loveland.k12.oh.us/Pupserv/JanFeb00.htm

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Father: (in a helpful tone) *James don't forget that 4 o'clock is homework time.*

James: *O.K., but if I don't remember, go ahead without me.*

Stop, think, discuss

Observe a classroom. Identify a student who appears to be having difficulty. After observing for a while, write down

(a) your views about why the student is having difficulty,
(b) what was tried in an effort to help,
(c) what seemed to help and why,
(d) what didn't work and why.

5) Sequencing Special Assistance

In making general decisions about intervention, most professionals would agree that the least amount needed should be used. For example, if a youngster can be helped effectively in the regular classroom by the regular teacher, this seems better than putting the individual in a special education program. When a young child (five-to-eight-year olds) has problems learning at school, a decision must be made about whether instruction in that area should be delayed until learning might be easier. This concern arises with respect to young children whose perceptual development is slower than average for their age group. Similar decisions may arise with adolescents who are so anxious or so unmotivated that they are not ready to pursue learning vigorously in a particular area.

Using the Least intervention needed. The principle of "least intervention needed" and the related idea of placement in the "least restrictive environment" are intended to provide a guideline related to such decision making. The guideline can be stated as,

> *Do not disrupt or restrict a person's opportunity for a normal range of experiences more than is absolutely necessary.*

The guideline recognizes that interventions that are very disruptive or restrictive tend to narrow an individual's immediate and future options and choices. The negative results can include poor self-concept, social alienation, and loss of career and other life opportunities.

There has been a great deal of positive support for the principle of least intervention needed and for descriptions of what types of placements are seen as least restrictive. There are, however, some problems. In particular, what is considered the least restrictive setting may be the most restrictive in the long run if it cannot meet the needs of the individual placed there.

> Take the case of Joel and his friend Jesse. In sixth grade, they were in the same class and were both behind in their reading. It was decided to keep them in a regular sixth-grade classroom and provide them with special in-class tutoring for an hour a day. Joel has a learning disability and is reading at no better than the second-grade level; Jesse has no disability and is reading at the fifth-grade level. Both respond reasonably well to the tutoring. Jesse also begins to perform satisfactorily during other times of the day. Joel continues to have trouble learning at other times, and he also tends to be a behavior problem.

What do you think about this?

Clearly, the tutoring keeps both students in the mainstream. However, someone is bound to ask:

> *"Might it not be better to place Joel temporarily in a special classroom that can be more responsive to his educational needs so that he can overcome his problems and then return to perform successfully in the mainstream?"*

> *"After all,"* the argument continues, *"isn't it much* ***less restrictive*** *in the long run to get intensive treatment so the problem might be overcome as quickly as possible? In so many cases, what might seem like the less restrictive approach may mean added years of involvement in special treatments, and the results may not even be as good."*

The assumption of the principle of least intervention needed is that placement will be in the least restrictive, but also most effective environment. A short stay in a more restrictive placement may be more effective than a long stay in a minimally restrictive but less effective program. In general, the relatively small number of individuals with severe problems are the most likely candidates for the more restrictive placements.

Sequencing Levels A, B, C. The concept of using the least intervention needed can be applied to focusing on Levels A, B, or C. The point is to ensure the right amount of assistance is provided so that first and foremost the student's needs are addressed. At the same, the idea is to keep the interventions from becoming too intrusive and to ensure the costs and benefits are appropriately balanced.

When special assistance is indicated, the teacher may focus on any of the three levels described. However, the sequence and level differ depending on whether the student has minor and occasional problems or is found to have severe and pervasive problems. The process involves the following sequence:

For learners with minor or occasional problems, the initial focus is on facilitating learning related to current tasks and interests and on expanding the range of interests. The procedures involve (1) continued adaptation of methods to match and enhance current levels of motivation and development and (2) reteaching specific skills and knowledge when the student has difficulty.

But what if the problem continues?

If the problem continues and is assessed as severe, the focus shifts to assessment and development of missing prerequisites (Level B) needed for functioning at the higher level. Again, procedures are adapted to improve the match, and reteaching is used when the learner has difficulty. If missing prerequisites are successfully developed, the focus returns to Level A.

> *The intent in proceeding in this sequential and hierarchical way is to use the simplest and most direct approaches first whenever problems appear minor. However, if available data indicate the presence of severe and pervasive motivation or developmental problems, instruction at Level B is begun immediately.*

If help at Level B is not effective, the focus shifts to Level C. Only at this level is the emphasis on factors that may interfere with functioning, that is, incompatible behaviors and interests and/or dysfunctional learning mechanisms.

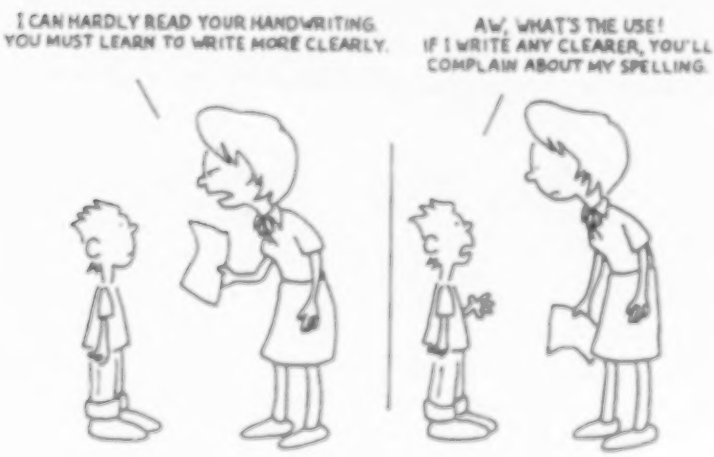
At Level C, there is increased and intensified use of a wide range of instructional techniques. As soon as feasible, the focus shifts back to prerequisites (Level B) and then on to current tasks and interests (Level A). The special strategies are used whenever and as long as necessary.

A Cautionary Note

There has been a tendency to redefine and constrict the curriculum once an individual is identified as needing special assistance. For example, remedial programs often focus primarily on a limited range of factors related to basic skills and pay relatively little attention to other opportunities that enhance learning. Always working on one's problems and trying to catch up can be a grueling experience. One has to be tremendously motivated (and perhaps a bit masochistic) to keep working on fundamentals and problem areas day in and day out.

Limiting the focus to special assistance presumes the learner cannot learn when motivated to do so and risks making the whole curriculum rather deadening. Broadening the focus to an increased range of developmental tasks and enrichment activities not only can balance the picture a bit, but also may prove to be the key to finding better ways to help an individual overcome her or his problems. A comprehensive curriculum also is essential to minimize the degree to which students are delayed in accomplishing major developmental tasks that are not affected by factors interfering with learning.

Even among those with pervasive and severe problems, there are likely to be some areas in which their learning problems are not severely handicapping. These are areas in which learning can proceed without special assistance or, at least, in which the focus can be on Level B or A. In such cases, an individual would be pursuing learning at several levels at once.


I CAN HARDLY READ YOUR HANDWRITING. YOU MUST LEARN TO WRITE MORE CLEARLY.
AW, WHAT'S THE USE! IF I WRITE ANY CLEARER, YOU'LL COMPLAIN ABOUT MY SPELLING.

A couple of examples may help further clarify this sequential and hierarchical approach to remediation.

Larry had a minor reading problem. Joan's problem was somewhat more severe.

Mr. Johnston's first efforts to help Larry improve his reading skills involved a variety of reteaching strategies. The activity focused on current reading tasks in which Larry had indicated an interest. The reteaching strategies were not simply a matter of trying more of the same -- more drill, for example. He tried alternative procedures ranging from commonly used explanations, techniques, and materials (such as another example or analogy, a concrete demonstration, a memorization strategy) to less common, specialized, *remedial* techniques (such as a multisensory method).

After working on this level for a week, Mr. Johnston found that over the preceding years, Larry had not learned a number of prerequisites widely viewed as reading-readiness skills. For example, Larry had difficulty following directions involving more than one point at a time, and he had problems ordering and sequencing events described to him. He also seemed to have little awareness of the relationship between the spoken and the printed word. As he assessed these problems in his daily work with Larry, Mr. Johnston pointed them out, and they agreed to include them as a major focus of instruction.

In other cases, Mr. Johnston had found that once the missing prerequisites were learned, students had little problem learning basic reading skills. This turned out to be the case with Larry.

Joan's situation, however, proved to be more difficult. Because her problem was more severe, Mr. Johnston had focused from the start on absent reading prerequisites. As he worked with her over a period of several weeks, he found that she had trouble learning most of the prerequisites he taught her and retained only a small amount of what she learned. Thus, he moved on to try to detect any dysfunctional learning mechanisms that might be interfering with her learning.

Over a period of weeks, it became clear that Joan was having widespread difficulty discriminating sounds and was continuing to have severe trouble recalling what she had learned the day before. Rather than have her continue to experience failure, Mr. Johnston shifted the focus of instruction. The time usually spent on reading instruction was devoted to helping overcome her learning handicaps. Activities she wanted to do were identified; as she had trouble, he worked with her using techniques that stressed multisensory involvement. To improve her retention, he encouraged her to take smaller amounts, and together they identified a variety of interesting activities with which she could immediately apply and practice what she was learning.

At first, Joan was hesitant to try things that she had failed at previously. Mr. Johnston did not push. He followed her lead and, at the same time, increasingly encouraged her to risk exploring new things. It should be noted that one of Mr. Johnston's goals with Joan was to help her increase her feelings of competence. When he first began working with her, however, she perceived the special help as another sign of her lack of competence, and this made her feel worse. Such a reaction is common. In the end, as was usually the case with such students, Mr. Johnston found Joan's progress to be slow but steady.

6) Referral When Necessary

When it is necessary to seek specialized services for a student and/or their family, it is essential that a sound referral process is in place at the school. If such a process is not in place, you will want to advocate for development of student and family assistance programs that weave together relevant school and community resources to help meet the need.

It is important to remember that referral is an intervention in and of itself. It conveys that there are problems beyond those you can address in the context of regular classroom activity. When the referral is for learning and/or behavior problems, it should signify that you have done everything feasible to address the problem prior to the referral.

Referral Intervention Guidelines

A referral intervention should minimally

- provide readily accessible basic information about all relevant sources of help
- help the student/family appreciate the need for and value of referral
- account for problems of access (e.g., cost, location, language and cultural sensitivity)
- aid students/families to review their options and make decisions in their own best interests
- provide sufficient support and direction to enable the student/family to connect with an appropriate referral resource
- follow-up with students (and with those to whom referrals are made) to determine whether referral decisions were appropriate.

A Few Related References*

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Angle, B. (1996). 5 steps to collaborative teaching and enrichment remediation. *Teaching Exceptional Children, 29*, 8-10.

Baas, A. (1991). *Promising Strategies for At-Risk Youth.* ERIC Digests Series. ERIC Identifier: ED328958.

Churton, M.W., Cranston-Gingras, A., & Blair, T.R. (1998). *Teaching Children with Diverse Abilities.* Boston, MA: Allyn & Bacon.

Elias, M.J., & Clabby, J. (1992). *Building SocialProblem Solving Skills: Guidelines from a School-Based Program.* San Francisco: Jossey-Bass.

ERIC Digest #E521. (1993)., *Including Students with Disabilities in General Education Classrooms.* ERIC Identifier: ED358677.

ERIC Digest Series. (1997). *From At-Risk to Excellence: Principles for Practice.* ERIC Identifier: ED413765.

Falvey, M.A. (Ed.) (1995). *Inclusive and Heterogeneous Schooling: Assessment, Curriculum, and Instruction.* Baltimore, MD: Paul Brookes Publishing Co.

Fitzgerald, G.E. (1994). Using the computer with students with emotional and behavioral disorders. *Technology & Disability, 3*, 87-99. (Theme issue: Special education).

Gresham, F. M. (1995). Best Practices in Social Skills Training in A. Thomas and J. Grimes (Eds.) *Best Practices in School Psychology-III* (pp. 1021-1030). Washington, D.C.: The National Association of School Psychologists.

Hammill. D.D., & Bartel, N. (1995). *Teaching students with learning and behavior problems.* Austin, TX: pro-ed.

Harris, A.J.,, & Sipay, E.R. (1990). *How to increase reading ability: A guide to developmental and remedial methods.* 9th ed. NY: Longman.

Lindsey, J.D. (Ed). (1993). *Computers for exceptional individuals.* Second edition. Austin, TX. pro-ed.

Male, M. (1994). *Technology for inclusion: Meeting the special needs of all students.* Second edition. Needham Heights, MA Allyn & Bacon.

McCarney, S.B., Wunderlich, K.C., & Bauer, A.M. (1993). *The pre-referral intervention manual.* Hawthorne Educational Services.

Meichenbaum, D. & Biemiller, A. (1998). *Nurturing Independent Learners: Helping Students Take Charge of Their Learning.* Boston, MA: Brookline Books.

Miller, L., & Newbill, C. (1998). *Section 504 in the classroom: How to design and implement accommodation plans*. Austin, TX: pro-ed.

Putnam, J.W. (1993). *Cooperative Learning and Strategies for Inclusion: Celebrating Diversity in the Classroom*. Baltimore: Paul H. Brookes.

Ripley, S. (1997). Collaboration between General and Special Education Teachers. *ERIC Digest*. ERIC Identifier: ED409317.

Slaven, R.E. (1990). *Cooperative learning: Theory, research, and practice*. Englewood Cliffs, NJ: Prentice-Hall.

Willis, S. (1996). Managing today's classroom: Finding alternatives to control and compliance. *Education Update, 38*. http:www.ascd.org

Winebrenner, S. (1996). *Teaching Kids with Learning Difficulties in the Regular Classroom*. Minneapolis, MN: Free Spirit Publishing.

Working Forum on Inclusive Schools (1994). *Creating Schools for All Our Students: What 12 Schools Have to Say*. Reston, VA: Council for Exceptional Children.

York-Barr, J., Kronberg, R., & Doyle, M.B.(1996). *Creating Inclusive School Communities: A Staff Development Series for General and Special Educators*. Baltimore, MD: Paul H. Brookes.

Yoshimoto, R (2000). Celebrating Strengths And Talents Of Dyslexic Children: An Educational Model. See www.idonline.org/ld_indepth/abilities/celebrating_strengths.html

For a set of *Readings on the Use of Technology for Individuals With Disabilities* developed by the ERIC Clearinghouse on Disabilities and Gifted Education, see http://ericec.org/minibibs/eb16.htm

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

Unit E

Objectives

The intent in this Unit is to help you learn more about:

(1) *the many ways technology can be used beneficially in the classroom and some cautions and caveats* (After going over the material, be sure you can describe how you plan to enhance the use of technology in your classroom and indicate the benefits you expect will result from doing so.)

(2) *how technology can support efforts to provide students with special assistance and enhance access to and by the student's home* (After going over the material, be sure you can discuss at least three ways you plan to use technology for these purposes.)

Outline for Unit E

1) Technology in the Classroom – A Big PictureOverview
2) Applications and Benefits of Technology in the Classroom
   a) Uses and Benefits
   b) Caveats and Cautions
3) Supporting Special Assistance
4) Access to and By the Home
5) Some Websites for Classroom Resources and a Few References on Using Technology

A Few Maxims for the Internet age:

>The modem is the message.
>Don't byte off more than you can view.
>What boots up must come down.
>Virtual reality is its own reward.
>Give students a fish and you feed them for a day; teach them to use the Net and they won't bother you for weeks.

Unit E
Capitalizing on Technology

Just as technology is reshaping other institutions, it has the potential to reshape education, ending the disjunction between school and the broader society. Technology offers unlimited ways of learning, of teaching, and of running schools. It provides new ways for everyone involved in education to be openly accountable to parents, to communities, and to students.

From: "Reinventing Schools: The Technology is Now!" (1995).
National Academy of Sciences and National Academy of Engineering.
http://www.nap.edu/readingroom/books/techgap/welcome.html

". . . Technological literacy – meaning computer skills and the ability to use computers and other technology to improve learning, productivity, and performance – has become as fundamental to a person's ability to navigate through society as traditional skills like reading, writing, and arithmetic. Yet, for the most part, these new technologies are not to be found in the nation's schools. Students make minimal use of new technologies for learning, typically employing them for only a few minutes a day. Indeed, the hard realities are that only 4 percent of schools have a computer for every five students (a ratio deemed adequate to allow regular use) and only 9 percent of classrooms are connected to the Internet. In schools with large concentrations of low-income students, the numbers are often even lower. Research and the experiences of schools in the forefront of the current "digital revolution," however, underscore the enormous learning opportunities available through technology . . . ."

R. Riley, M. Kunin, M. Smith, & L. Roberts (1996). "Getting America's Students Ready for the 21st Century: Meeting the Technology Literacy Challenge. A Report to the Nation on Technology and Education."
U.S. Department of Education.

. . . Teachers receive less technical support than does any other group of professionals. Computers occupy the desktops of most professionals in the United States, but not in the classrooms; there, computers are often used exclusively by students . . . .

From: "Reinventing Schools: The Technology is Now!" (1995).
National Academy of Sciences and National Academy of Engineering.
http://www.nap.edu/readingroom/books/techgap/welcome.html

Much has been written about how the computer will revolutionalize what happens in the classroom. Our position is that the classroom teachers will continue to be central in the instructional process, and that computers provide one more resource, in some cases a unique resource, for enabling learning to take place.

Donald Hammill & Nettie Bartel

Stop, think, discuss

Make a list of all the ways you can think of for using technology to enable learning in the classroom.

The central importance of the classroom teacher as the key to student success seems to us especially clear when it comes to students whose functioning is associated with disengagement from formal instruction.

At the same time, we believe that computers and other technological advancements offer tools for improving almost every facet of efforts to address barriers to learning and promote healthy development. Available software programs, databases, and telecommunications have opened the world to all students who have access to a computer. And, fortunately, access is increasing. Useful Websites and listservs are growing at an exponential rate. Email, bulletin boards, and chat rooms provide intriguing possibilities when used appropriately. And, ironically, the potential benefits of television programs, video and audio libraries and recording capabilities, and other familiar audio-visual aids have yet to be realized.

Every teacher needs to understand how advanced technologies can help transform classroom learning, "homework," and home involvement in schooling. Then, we all need to expand our capability to integrate this understanding effectively and appropriately into daily learning and teaching activity.

As with all learning, it is important to remember that the key to effective use of technology is found in the concept of a good match with the learner's motivation and capabilities.

The Exhibit on the next page provides a glimpse at how technology will increasingly aid in efforts to teach the young and build communities of understanding.

Exhibit

Using Technology to Build Communities of Understanding

(Excerpt from: YEAR 2005: A Report to the U.S. Congressional Office of Technology Assessment
Prepared by: Center for Technology in Learning – SRI International)*

. . . in our vision for the year 2005, digital technologies are used to create a web of relationships, engagement, and participation that transforms the educational enterprise and makes it the center of community life. Today, schools, homes, and workplaces function separately – connected by geography and circumstances but infrequently by common purpose and collaborative action. But in our vision of communities of understanding, digital technologies are used to interweave schools, homes, workplaces, libraries, museums, and social services to reintegrate education into the fabric of the community. Learning is no longer encapsulated by time, place, and age but has become a pervasive activity and attitude that continues throughout life and is supported by all segments of society. Teaching is no longer defined as the transfer of information, learning no longer as the retention of facts. Rather, teachers challenge students to achieve deeper levels of understanding and guide students in the collaborative construction and application of knowledge in the context of authentic situations and tasks. Education is no longer the exclusive responsibility of teachers but benefits from the participation and collaboration of parents, business people, scientists, seniors, and, of course, students of all ages.

How can technology support this transformation? First of all, the emerging information superhighway will connect schools with each other and with businesses, libraries, museums, and community resources. The connections between schools and homes will help students to extend their academic day, allow teachers to draw on significant experiences from students' everyday lives, and allows parents to become more involved in the education of their children and to have extended educational opportunities of their own. Connections between school and work will allow students to learn in the context of real-life problems, allow teachers to draw on the resources of technical and business experts, and allow employers to contribute to and benefit from the fruits of an effective educational system. Connections between schools, homes, and the rest of the community will enable students to relate what is happening in the world outside to what is happening in school, will allow teachers to coordinate formal education with informal learning, and will allow the community to reintegrate education into its daily life.

To make these connections pay off, this infrastructure will be filled with effective and engaging materials and tools that challenge students, afford new activities, and motivate learning. When users access the superhighway, they will find rich, multimedia resources in mathematics, sciences, and humanities and rich contexts of authentic situations and tasks. They will have access to tools that allow them to communicate and collaborate with others, consider ideas from multiple perspectives, express their ideas in multiple ways, build models, and explore simulations....

*SRI international, 333 Ravenswood Ave. Menlo Park, CA 94025-3493 Ph: 415/326-6200.

1) Technology in the Classroom – A Big Picture Overview

Most of us already are familiar with the many ways the personal computer has increased access to the "information highway," as well as its contributions as an instructional tool. But these are only the tip of the iceberg. Besides a multitude of other Internet applications and computer assisted interventions, there is growing use of telecommunications to provide distance learning, telelearning, and virtual classrooms for students and staff. Teacher and parents are connecting and interacting via Email; students are receiving online tutoring and mentoring; teachers are accessing online lesson plans and networking online with colleagues about various practices. DVD and multimedia technology is expanding, exponentially, the possibilities for enhancing these and other activities in diverse teaching fields such as the arts, mathematics, science, history, and sports.

On another front, the growing need for data in planning, implementing, and evaluating interventions is speeding up development of integrated information management systems.

The Exhibit on the next page highlights a range of intervention activity that can benefit from advanced technological applications and some of the categories of tools that are available.

Clearly, a brave new world has emerged. There is much for all of us to learn about advanced technological applications. We all need to grasp the big picture and develop a plan and an agenda for integrating such applications into our daily work.

Exhibit

Advanced Technology: Some Tools and Their Uses

FORMS OF INTERVENTION	TOOLS					
		Personal Computers	*TV/ DVD*	*Multimedia*	*Systems for Integrated, Computerized Information Management*	*Specialized Technologies for those with Disabilities*
	Information & Resource Access					
	Self-help					
	Support Groups, Networking, Conferencing					
	Assessment					
	Referral/ Triage/ Care Monitoring					
	Planning/ Implementation (instruction, enrichment, remediation, care, counseling, and treatment)					
	Accountability/ Quality Assurance/ Evaluation					
	Professional Education (including distance learning, supervision, and consultation)					

2) Applications and Benefits of Technology in the Classroom

Over the last 20 years, development and increased availability of lower-cost personal computers, the Internet, two-way audio and video, cables, fiber optics, and satellites have led to widespread use of technology in schools, homes, libraries, and neighborhoods. Increased accessibility including a growing distance learning movement has made technological tools a viable aid for all students and especially for those in remote regions of the nation and in underserved communities.

a) Uses and Benefits

As the U.S. Department of Education's Educational Technology Plan states:

> One of the most promising uses of technology in education involves teachers helping students actively engage in learning. In fact, the increasing power and versatility of computers create teaching and learning possibilities dramatically different from those that were previously available, providing teachers with opportunities to enrich their instruction and students with opportunities to contribute useful resources to others.
>
> (See *eLearning: Putting a World Class Education at the Fingertips of All Children* – ww.ed.gov/Technology)

Use of technology helps in accommodating a wider range of student differences by enabling the teacher to vary instructional pacing, content, support, and directions. Besides directly supporting instruction, technology enhances connections and interactions among students and with a host of resources, including contact with individuals and organizations across the world through the Internet. It allows new forms of support, such as online mentoring for students and teachers. It also assists teachers in "managing" information, material resources, aides and volunteers, budget and so forth by providing secured, timely, accurate data, as well as enabling them to add data directly to management systems.

Technology, of course, also has become a fundamental content area in the curriculum. Not only are students taking courses in the subject matter, entire high school academies are devoted to this career arena.

Student #1: Where have you been?
My Email said to meet us at 10 a.m.
Student #2: My server is down, didn't you get my Fax?
Student #3: I told you we should have paged him

When asked about the benefits of bringing advanced technology into the classroom, teachers and administrators note that it enhances ways to promote and support

- motivation
- thinking processes
- equity
- availability of and access to a wide range of learning opportunities and special assistance
- technology capability for now and as preparation for the future
- quality improvement, assurance, and accountability

Technology also is seen as making significant changes in school-wide culture and structure.

Despite all the potential benefits, sophisticated uses in the classroom are still not the norm. Most teachers have a great deal to learn about how to

- use multimedia educational software to teach facts and concepts and to enable students in practicing and presenting what they are learning
- teach students to use the Internet as a powerful new way to analyze and understand the world around them and communicate with others
- teach students computers as a content area
- use advanced technology as a continuing education and technical assistance tool.

Clearly, computers and other technological advances are changing classroom teaching practices and are revolutionizing the way schools conduct business. They provide systems for planning and managing daily work, systems for information management, and systems to aid staff to work together and work with other agencies. As a whole, technological tools represent key mechanisms to aid efforts to enhance quality, provide data on accomplishments, and facilitate accountability.

The Exhibit on the following pages provides some specific examples of how advanced technology can be applied and can benefit classroom instruction.

Exhibit

Applications and Benefits of Information Technology

Excerpt from an ERIC Digest authored by J. Kosakowski (ED420302 98)
http://www.ed.gov/databases/ERIC_Digests/ed420302.html

More than three decades ago, computers and related information technologies were introduced to educators as educational tools. Today, there are computers of various descriptions in nearly all schools in the United States. Teachers, school administrators, government officials, and others faced with the costs involved in technology implementation must constantly evaluate the educational benefits of technology. Is there research or other evidence that indicates computers and advanced telecommunications are worthwhile investments for educators? This Digest summarizes the observed benefits of technology implementation. The importance of evaluating the effects of technology on learning is also addressed.

APPLICATIONS OF TECHNOLOGY TO BASIC SKILLS

Using educational technology for drill and practice of basic skills can be highly effective according to a large body of data and a long history of use (Kulik, 1994). Students usually learn more, and learn more rapidly, in courses that use computer assisted instruction (CAI). This has been shown to be the case across all subject areas, from preschool to higher education, and in both regular and special education classes. Drill and practice is the most common application of CAI in elementary education, the military, and in adult educational settings . . . .

APPLICATIONS OF TECHNOLOGY TO ADVANCED SKILLS

The application of educational technologies to instruction has progressed beyond the use of basic drill and practice software, and now includes the use of complex multimedia products and advanced networking technologies. Today, students use multimedia to learn interactively and work on class projects. They use the Internet to do research, engage in projects, and to communicate. The new technologies allow students to have more control over their own learning, to think analytically and critically, and to work collaboratively . . . .

SUPPORT FROM THE COMMUNITY

Parents, businesses, and community members can use technology as a springboard to become more involved in the activities of neighborhood schools. All can help with wiring or technical support. Parents can use e-mail to facilitate communication with teachers and administrators. Businesses can use e-mail to help mentor students and help them prepare for the workplace.

References:

Fletcher, J.D., Hawley, D.E., & Piele, P.K. (1990). Costs, effects, and utility of microcomputer assisted instruction in the classroom. "American Educational Research Journal," 27, 783-806.

Kulik, J.A. (1994). Meta-analytic studies of findings on computer-based instruction. In E.L. Baker and H.F. O'Neil, Jr. (Eds.). "Technology assessment in education and training." Hillsdale, NJ: Lawrence Erlbaum.

Exhibit (cont.) Applications and Benefits of Information Technology

Excerpted from: *Learning from television: A review of the research.* (1996). http://www2.edc.org/CCT/cctweb/public/include/pdf/10_1996b.pdf

Traditionally, educators have perceived television as not particularly beneficial to literacy development. Concerns were fueled by findings suggesting that with the introduction of television people spend less time reading books and reading scores decline (e.g., Corteen, 1986; Robinson, 1972; Werner, 1971). However, as our society is striving to make adjustments to the decline in literacy skills and new ways of learning and teaching are being explored, educators are becoming interested in exploring the educational potential of television and video for teaching basic literary skills such as reading, writing, and math.

The interest in television as an educational medium has increased for several reasons. First, existing educational television programs that were developed to enhance the literacy development of both children (e.g., *The Electric Company, Sesame Street, Ghostwriter*) and adults (e.g., television-supported distance learning programs from the Open University in Great Britain, second language programs produced by TV Ontario) have been quite successful in achieving their intended outcomes (e.g., Bates, 1983; Bryant, Alexander, & Brown, 1983; Soudack, 1990). Second, because television is a very accessible medium, it has the potential to reach learners that have not been able to participate in traditional adult literacy programs. Television is accessible both in terms of its technology and in terms of its content. By 1985, 99% of all US households had at least one television set (Nielson Reports, 1986). Moreover, viewers are intimately familiar with the content of television and tend to associate it with pleasurable experience because of its power to entertain (Bates, 1983). Finally, the development of new visual technologies, (e.g., video recording and playback, CD-ROM and videodisk technology, multimedia computer technology) makes it possible to provide users with more control and interactivity and thus to adapt televised instruction to the needs of a variety of learners and learning styles . . . .

The research literature suggests that the content of television can have four broad types of effects on people. They include behavior, attitudes, beliefs and values, knowledge, and cognitive skills.

References:

Bates, A. W. (1983). Adult learning from educational television: The Open University experience. In M. J. Howe (Ed.), Learning from television: Psychological and educational research. London: Academic Press.

Bryant, J., Alexander, A., & Brown, D. (1983). Learning from educational television programs. In M. J. Howe (Ed.), Learning from television: Psychological and educational research. London: Academic Press.

Corteen, R. S. (1986). Television and reading skills. In T. M. Williams (Ed.), The impact of television. New York: Academic Press.

Moeller, B. (1996). Learning from television: A review of the research. Center for Children and Technology Nielsen Report on Television (1986). Northbrook, IL: A.C. Nielson Co.

Robinson, J. P. (1972). Television's impact on everyday life: Some cross national evidence. In E. A. Rubinstein, G. A. Comstock, & J.P. Murray (Eds.), Television and social behavior: Vol. 4.Television in day-to-day life: Patterns of use (pp.410-431). Washington, DC: U.S. Government Printing Office.

Soudack, A. (1990). Televised second-language courses for adults: A review of relevant research. Toronto, ON: TV Ontario Evaluation and Project Research Report No. 8-1990-91.

Werner, A. (1971). Children and television in Norway. Gazette, 16(2), 133-151.

Exhibit (cont.) Applications and Benefits of Information Technology

Example of Multiple Technological Applications in a School District
(Dallas Independent School District's Technology Strategic Plans)
www.dallas.isd.tenet.edu/depts/technology/plan/strategic_plan_part4.htm

The Texas State Board of Education approved a new curricular area entitled *Technology Applications within the Texas Essential Knowledge and Skills* – implemented September 1, 1998. Beginning with the class of 2001, every student must take a year-long course in Technology Applications as a prerequisite to high school graduation. Integration of appropriate technology within all levels of educational system is a primary goal . [The plan states that:] "Instructional technology and services must receive the greatest attention in the future if the vision and strategic goals for DISD are to be met. Above all, this plan must ensure equitable access by all students to both the technology and the learning resources that it provides."

The intent is to support, facilitate and enhance development and implementation of comprehensive strategies for using technology in every aspect of the educational environment. In doing so, the district staff and students will have access to global information resources, communication tools, and be able to realize "the creative potential which can be provided by technology today and in the future." Instruction is to be available to:

Any one (every student, teacher, administrator). Everything is to be available online via computer and communications technology (using leading edge computers, advanced video devices, and communications links). This school environment is to be one where every educator and student can get hands-on training and access when or where needed and where professional colleagues can access financial data and info on student performance and have the analytical tools to use that information effectively.

Any place that has a network hookup or communications access. "Every student should have the opportunity to become immersed in the sights, sounds, and languages of other countries, visit museums, explore the inner workings of a cell, or explore outer space from a virtual space suit."

Any time of the day or night, any day of the week, any week of the year. "Open entry, open exit; anytime and all the time" to free students from the limitations of traditional education and "increase their capabilities to learn and to take the courses they need when and where they need them for the rest of their lives."

Education will continue its transformation by the following:

- Curriculum organized as projects involving sustained and complex co-investigations
- Accelerated curriculum available to everyone
- Many secondary classes taught via distance education
- Media center resources distributed via network anywhere
- Student access to worldwide connectivity available anywhere, any time, for resources and interaction
- Searchable textbooks and other media resources available online
- Students access any time, anywhere, to class assignments and homework
- Specific video and audio conferences set up in advance for cooperative projects and debriefings
- Portable, interconnected, wireless computers with access to multimedia communications for all students
- Timely and convenient professional development with access to experts thru computer/video-conferencing
- No geographical boundaries for some classes – instructional resources may be accessed all around the world
- Student scheduling online for a variety of classes on a variety of schedules
- Help Desk support for all software with dispatch ability to support and schedule every need, from software training and support to installation and ordering field services
- Complete and current financial data readily available to guide development of multiyear budget projections.

Electronic Portfolios: A New Idea in Assessment

Excerpts from ERIC Digest.: (1995) ED390377: Anna Maria D. Lankes*

INTRODUCTION

Teachers and administrators are showing increased interest in becoming part of a "new wave" of assessment in the classroom; assessment which includes authentic and performance-based measures. These methods of assessment allow students to demonstrate desired performance through real- life situations (Meyer, 1992). Such methods of assessment are not limited to multiple-choice and standardized tests, but include projects which require students to demonstrate their problem-solving skills as well as their skills in analyzing and synthesizing information. Several school districts across the United States have reported improved student performance associated with new assessment programs (Herman, 1992). Many schools are developing new methods for measuring students' progress in both the elementary and secondary classroom. One of these new assessment measures, the portfolio, has become increasingly popular, and technology is helping with its creation and management.

WHAT IS A PORTFOLIO?

A portfolio at the K-12 education level is essentially a collection of a student's work which can be used to demonstrate his or her skills and accomplishments. An educational portfolio is more than just a group of projects and papers stored in a file folder . . . .

TECHNOLOGY AND THE CREATION OF COMPUTER-BASED PORTFOLIOS

How to store and manage portfolio materials is a concern shared by many educators interested in implementing portfolio programs. In order to keep portfolios which would include papers, projects, and video and audio tapes for a class of students for 13 years (K-12), a school would need several additional classrooms to store this wealth of information. Many educators have been reluctant to implement portfolio assessment programs in their schools because of storage concerns like these. A likely solution to this problem is the creation and storage of portfolios using computer technology.

The terms "computer-based portfolio" and "electronic portfolio" are used to describe portfolios saved in electronic format. Electronic portfolios contain the same types of information as the portfolios discussed earlier, but the information is collected, stored, and managed electronically. Since current technology allows for the capture and storage of information in the form of text, graphics, sound, and video, students can save writing samples, solutions to mathematics problems, samples of art work, science projects and multimedia presentations in one coherent document. A single computer with a large storage capacity can store portfolios for all of the students in a class. With more students creating multimedia projects, however, a floppy or even a hard disk might not suffice for storage. An alternative is to store student portfolios on a CD-ROM (a compact disk which stores text, sound, graphics and video). A CD-ROM can store approximately 650 MB of information or 300,000 sheets of typed text. This might include all of the portfolios for an entire grade level of students. A computer-based portfolio program also allows for easy transfer of information. An individual computer disk or CD-ROM could be created to transport a student's documents from teacher to teacher or school to school . . . .

BIBLIOGRAPHY

Herman, J. L. (1992). What research tells us about good assessment. "Educational Leadership," 49(8), 74-78. (EJ 444 324)

Meyer, C. A. (1992). What's the difference between "authentic" and "performance" assessment? "Educational Leadership," 49(8), 39-40. (EJ 444 312)

*Available from: ERIC Clearinghouse on Information & Technology, Syracuse University, 4-194, Center for Science and Technology, Syracuse, NY 13244-4100 e mail: eric@ericir.syr.edu http://ericae.net/edo/ED390377.htm

b) Caveats and Cautions

Ninety-nine percent of American public schools have computers, and 93 percent of students use them during the school year. But these numbers can be deceiving. Many of the computers in schools are older, cannot be networked, and cannot run the newest software. Furthermore, many of these computers are not being used in ways that exploit their full capabilities. Instead, they are being used to reinforce outdated models of education that fall far short of the goal of providing students with what they need in today's world. For networks to be used effectively in schools, a new model of education is needed. This new model goes to the heart of the educational enterprise, reshaping the roles of teachers, students, and technology.

From: "Reinventing Schools: The Technology is Now!" (1995).
National Academy of Sciences and National Academy of Engineering.
http://www.nap.edu/readingroom/books/techgap/welcome.html

"The Internet could change the lives of average citizens as much as did the telephone in the early part of the 20th century and television in the 1950s and 1960s. Researchers and social critics are debating whether the Internet is improving or harming participation in community life and social relationships. This research examined the social and psychological impact of the Internet on 169 people in 73 households during their first 1 to 2 years on-line. We used longitudinal data to examine the effects of the Internet on social involvement and psychological well-being. In this sample, the Internet was used extensively for communication. Nonetheless, greater use of the Internet was associated with declines in participants' communication with family members in the household, declines in the size of their social circle, and increases in their depression and loneliness. These findings have implications for research, for public policy, and for the design of technology."

From: *Internet Paradox* by S. Kiesler, R. Kraut, V. Lundmark et al. (1998)
in the *American Psychologist*. www.apa.org/journals/amp/amp5391017.html

There is no good evidence that uses of computers significantly improve teaching and learning, yet school districts are cutting programs--music, art, physical education-that enrich children's live's to make room for this dubious nostrum.

Todd Oppenheimer (Atlantic Monthly, July, 1997)

Technology is a tool, not a solution to problems.
And, it brings with it iatrogenic effects.

Most "hardware" is only as good as its "software."

Technology content and processes both convey values.

No machine can take the place of the village in raising a child.

---

3) Supporting Special Assistance

Given caveats and cautions, technology holds great promise for students who require special assistance – including those with disabilities. The problem, as always, is to include technology in ways that establish a good match with the learner's motivation and capabilities.

In working to develop a good match, it is essential to explore with the student when and under what conditions a tool such as the computer might be useful and how best to adapt and integrate it into what the student indicates is a good fit. For example, a youngster might consider using the computer and other technological aids as

- *a teaching aid for initial learning of curriculum concepts, facts, skills, and attitudes* (e.g., demonstrations, illustrated presentations, simulations, problem-solving projects, educational games, and other special formats to engage the student; special tutorial programs to accommodate a student's need for additional assistance, special pacing, reteaching)

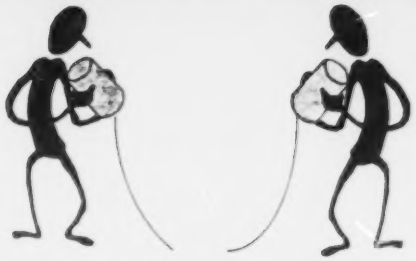
- *a performance and practice aid* (e.g., using word processing and calculator functions, spread sheets; use of simulations and other special activities that provide opportunities for motivated practice)

- *an evaluation aid* (e.g., a tool for test taking, record keeping, portfolio building, performance feedback)

All this can be especially important for students with specific disabilities. For example, as a 1996 report from the Center for Children & Technology notes:

> "Technology has software programs for word processing, for group conferencing, for sending and receiving electronic mail (e-mail), and for data storage and analysis (database programs). The integration of this technology into subject matter areas makes it possible for deaf students [and others in need of special assistance] to share their thoughts and ideas with teachers and other students in writing, and thus to experience written language as a tool for communication and thinking in the context of meaningful learning activities."

All in all, technology offers rich avenues for engaging students and providing them with opportunities to take the risks that are involved in learning and to do so in ways that minimize negative feelings about teachers and school.



4) Access to and by the Home

The Internet provides a major tool for connecting home and school. It can be used as a one-way communication vehicle from school-to-home, or it can be an interactive tool for engaging parents and other caretakers with the teacher.

In the first instance, schools already are using the Internet (both Email and Websites) to send homework assignments, data on progress, grades, attendance records, concerns about disciplinary incidents, updates on immunization records, and other school-related information directly to the home. Many parents see the Internet as a major tool for becoming involved in their children's education because it provides them with greater access to teachers and resources to help their youngsters.

> *A survey by the National School Boards Foundation reports that the main reason parents cite for buying home computers and obtaining home Internet access is for their children's learning/education.*

As an interactive tool, those in the home are starting to use Email as a way to communicate with teachers. This is especially important for parents whose situation makes it difficult to get to the school and for parents and teachers who need to be in frequent communication with each other related to a student's special assistance needs. It also provides teachers with a means for contacting the home that is less time consuming than telephone conversations. This allows for greater communication about positive accomplishments, as well as when problems must be addressed.

> *In the near future, schools will need to plan time for teachers to pursue Email interactions as a major strategy for enhancing home involvement in schooling.*

Student: The teacher said I should bring you this report on my progress

Father: What she says is you're not trying hard enough

You're grounded until she sends us a report saying you're doing well

Student: There you go again - blaming the messenger!

One Elementary Teacher's Experiences

VaReane Heese notes in a recent commentary:
(see *tech LEARNING* – www.techlearning.com):

What if you have only one computer in your classroom with Internet access? What if your students can't read yet?

Start simply. Choose a curricular area you are familiar with and be sure to visit the Website(s) in advance so you are acquainted with the content.

We use picture books with infants; we encourage young children to draw with picture clues. Think of graphics on the Internet in the same mode. Take your class to a weather site with great graphics and let them discuss, infer, and predict. Take them to a WebCam site and do the same. No need to write if they are not capable. Primary fieldtrips provide many discussions. Internet fieldtrips can do the same.

Second graders and older can go one step further. Send them to the computer with a partner, paying attention to cooperative skills and ability levels, of course. Provide a bookmarked site and tell them they will need to write down something they have seen, done, or learned at this site. Make questions more precise as student ability increases. You can also require higher order thinking skills by using open-ended questions if you feel your students are capable.

I like to keep these questions and their answers in an Internet Fieldtrip Book for primary students. Each entry is dated and it becomes a nice tool for use at conferences. Parents can see how their child's sentence structure, punctuation, and written expression have improved since the beginning entry. Navigation skills will certainly increase and student discussions with a partner will enable the pair to complete the written record with little or no difficulty. Eventually, you can encourage more inferences and predictions. At times, let them copy a graphic off a visited site and paste it into a drawing document so it can be printed, cut, and pasted into their report.

Another method of taking advantage of this technology might be something as simple as a worksheet with URLs at the top to type. These can, of course, be bookmarked ahead of time. Students are required to find fact answers to a set of questions. One way to introduce this is as a "Treasure Hunt."

Lessons involving performance both at and away from the computer are my favorite. Even primary students can complete some tasks if they are designed correctly. Just as they would have children take part in many activities revolving around a favorite book, teachers can decide upon different facets to include. They can be integrated into any subject area that applies. Two examples can be found at Education World under Teacher Lesson Plans: "Reading Without Seeing: Louis Braille and the Braille Alphabet" and "If I Had Been At Ellis Island."

Some of these types of lessons may even be classified as WebQuests. WebQuests are structured with a goal and focus, and can be designed for students of any age. A primary

(cont.)

(cont.)

group may embark on one as a class. The teacher chooses a curricular area and objective, and sets up a related series of sequential components that correspond to appropriate learning steps. WebQuests also focus on specific Internet resources that the teacher has selected. These sites may be bookmarked or URLs provided to students in written or electronic form. Some may be optional while others require a visit.

"A Taxonomy of WebQuests", written by Bernie Dodge of San Diego State University, is an excellent article that is available online. To make WebQuests more fun, students may be assigned or asked to assume roles. Another resource, outlined on Technology and Learning's Well Connected Educator Web site, is "Take a Cruise On The Internet". This simulation is also available in detail from Interact Publishers of Carlsbad, CA.

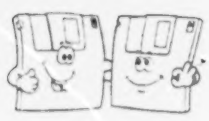
WebQuests can be short-term and occupy one to three class periods. Longer quests may take from a week to a month. Even if you are using a quest developed by someone else, you can tailor it to your needs or computer availability.

There is no reason why you cannot design your own WebQuest. Keep in mind that the task must be achievable and that students may use non-Web resources as well. They will need some guidance on how to organize and how the project will be evaluated. Some possibilities are a rubric or benchmarks to follow. Be sure to allow time for reflection and application to real life. In my opinion, much of the fun in designing your own WebQuest is the product choice. Perhaps students will create a debate, diary, or scrapbook. Maybe they will write a news article, poem, or play. They might choose to develop a Hyperstudio Stack or electronic slideshow. Be sure to involve them in making these choices.

TrackStar is an on-line interface that helps instructors organize and annotate Web sites (URLs) into lessons. It is ideal for designing your own WebQuest. LightSpan also has a Web Trip Maker that allows students to submit answers as they progress. You can evaluate the more open-ended questions yourself. You will find templates for WebQuests at the following San Diego University site: WebQuest Templates.

Of course, there are many wonderful WebQuests already designed and waiting for your students. Look at some of them before creating your own. You will probably find several to fit your curriculum and student abilities. These two sites contain some of my favorites: Dr. Alice Christie's Matrix of WebQuests and Learning With WebQuests.

The Internet can extend and enhance classroom resources as well as make education more fun for everyone involved!



5) Some Websites for Classroom Resources and a Few References on Using Technology

The following are a sampling of websites of use to classroom teachers:

www.webteacher.org/winnet/indextc.html -- webTeacher is a self-paced Internet Tutorial offering both basic and in-depth info about the World Wide Web. E-mail, video conferencing, chat rooms, Web page design, curriculum searches -- choose a topic you want to explore, choose your own pace, choose the depth of knowledge you desire. Then, because webTeacher is an interactive guide, you put your new knowledge to work immediately through online exercises and activities. webTeacher can be used alone or for group instruction.

www.lightspan.com -- is a free education portal for educators, parents, and students, providing a large range of resources, research tools, and grade-specific activities. It includes collaborative learning projects, lesson plan "search and share," a hook-up with Family PC for advice on software, hardware and Internet projects, and a partnership with Top Tutor for one-on-one tutoring opportunities with a "live" teacher.

www.bigchalk.com -- offers a variety of resources for the teacher, including lesson plans, information and links to tutorials on a multitude of topics, imaginative learning adventures, and connection to its partners (e.g., HomeworkCentral.com and MediaSeek Technologies)

www.classroom.com -- offers lessons plans investigating a variety of topics; has live and archived Web adventures, provides opportunities for students to interact in real time with teams of researchers in Africa and South America.

www.riverdeep.net -- online simulations for math and science instruction.

http://web66.coled.umn.edu/ -- The Web66 project is designed to facilitate intro of web technology into K12 schools. The goals are: (1) to help K12 educators learn how to set up their own Internet servers, (2) to link K12 web servers and the educators and students at those schools, (3) to help K12 educators find and use K12 appropriate resources on the web.

www.ala.org/parentspage/greatsites/amazing.html -- the American Library Association provides access to" 700+ great sites for kids and their caregivers."

http://educate.si.edu/resources/resourcedir.html -- Smithsonian Education are a set of special pages within the Smithsonian Institution's Website designed just for educators. It contains lesson plans and a section for professional development.

www.americaslibrary.gov/cgi-bin/page.cgi -- This is the Library of Congress' special pages for kids and families (and teachers). Of course, the rest of the site is a great info resource for students and teachers.

www.ed.gov/Technology/ -- The U.S. Dept. of Education's Office of Education Technology site has been described as the mother-lode of info on education/technology.

www.techlearning.com/content/reviews/articles/choice.html -- The *Teachers' Choice* page is designed to provide and get recommendations of Webster for classroom use and for professional development. Allows for keyword searches to find sites that meet your needs.

www.dlrn.org -- This Distance Learning Resource Network is operated by WestEd.

www.edc.org/FSC/NCIP/ -- The National Center to Improve Practice in Special Education Through Technology, Media and Materials seeks to improve educational outcomes for students with disabilities by promoting the effective use of assistive and instructional technologies among educators and related personnel serving these students.

http://curry.edschool.virginia.edu/go/multicultural/home.html – offers resources to teachers and links to other sites concerned with multicultural education.

http://connectedteacher.classroom.com/lessonplans/lessonplans.asp – offers a multitude of links to lesson plans.

www.thegateway.org – is a gateway, with links to lesson plans, curriculum units and other educational resources for teachers.

www.coreknowledge.org/CKproto2/resrcs/index.htm – conducts research on curricula, develops books and other materials for parents and teachers, offers workshops for teachers, and serves as the hub of a growing network of Core Knowledge schools.

http://tlc.ai.org/ - The K-12 Teaching & Learning Center provides free public guide to the best educational content on the internet.

www.coedu.usf.edu/~morris/lp_index.html – provides lesson plan ideas on the topics of Cross Age Tutoring, Multiple Intelligences, Cooperative Learning, Software Integrated Lessons Plans and more.

www.excel.net/~ssmith/coopstr.html – provides information on Active Learning, Cooperative Learning, Teaching Strategies, and Teaching in Block Time.

http://ericir.syr.edu/Virtual/Lessons/Ed_Tech/EDT0007.html – Technology Centers for the Integrated Technology Classroom provides ideas for "theme" based activities across the curriculum that incorporate technology.

www.educationplanet.com/lessonplanet/search/Math/Problem_Solving/ – Education Planet provides educator-approved resources and services for teachers, students and parents.

http://intranet.cps.k12.il.us – Instructional Intranet contains information useful for developing develop lessons, units, and assessments, and contains educational and technical resources used in forming lesson plans.

www.clre.org/index.htm – The Center for Youth Citizenship offers programs for students in grades K-12, trains educators, and promotes cooperative partnerships between business, education, and government.

www.2learn.ca/currlinks/2teach/netsteps/socialskills.html – This web site contains various links to sites regarding affective learning, social skills, and emotion.

www.teachers.net – Teachers.net has many resources available to teachers and educators who wish to form lesson plans.

www.teacherlink.usu.edu – TeacherLINK is a free resource to public educators and students. Their web site contains links to educational resources, lesson plans, classroom activities, teacher materials and more.

www.education.thelinks.com – Education.TheLinks.com contains a list of educational links for students, teachers, home schoolers, and others.

www.middleweb.com – MiddleWeb has resources for middle schools and middle grades. It seeks to explore the challenges of middle school reform while providing parents and educators with educational resources.

www.middleweb.com/CSLV2ConfIdeas.html – The following website has specific information about parent-teacher conferences.
www.edu.gov.mb.ca/metks4/tech/currtech/imym/authentic.html – This web site has information about books related to authentic assessment.

http://curry.edschool.virginia.edu/curry/centers/partnership/assessment.htm – This site has authentic assessment guidelines for students in grades 2. 7, 10, and in high school, in certain subjects.

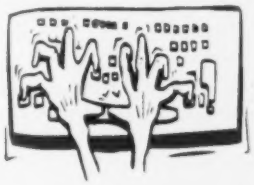
www.bgsu.edu/ct1/aa.html – An explanation of what authentic assessment is, followed by a list of links to authentic assessment-related sites.

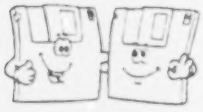
www.ascd.org – Association for Supervision and Curriculum Development (ASCD) provides professional development in curriculum and supervision; initiates and supports activities to provide educational equity for all students; and serves as a world-class leader in education information services.

www.edcen.ehhs.cmich.edu/home.html – Education Central is an electronic communication and resource center for professional educators.

www.artsednet.getty.edu – ArtsEdNet contains art-related curriculum ideas, lesson plans, image galleries and exhibitions, reading rooms and publications, and links to other educational art sites on the internet.

http://family2.go.com/raisingkids/learn/school/features/family_0000_01/dony/homework_tlp/homework_tlp.html – Homework Helper is a useful site for parents with kids who don't like to do homework. Contains links for homework strategies and homework help.





Exhibit

The Alphabet Superhighway www.ash.udel.edu/ash/

Under sponsorship of the U.S.Department of Education's READ*WRITE*NOW! Initiative, this site assists secondary and upper elementary students to create, locate, and communicate info through active learning, guided discovery, mentoring, competitions, and other on-line activities. It provides state-of-the-art educational experiences through libraries, schools, and even home computers that are linked to the World Wide Web.

The site is a resource for teachers to find materials and ideas for teaching almost any part of the curriculum; it is a place for students to browse for ideas and materials for reports and for in depth info on topics, for classes to build exhibits on problem based projects, for challenges, and for fun. And it is a place where students can improve their writing and information representation skills through writing for the Cyberzine and building exhibits.

How is it organized?

At the heart of the site are places for students to display their work--The Cyberzine and Exhibit Center , and facilities for finding information--the Library and the Smart Searcher, and for learning and reinforcing skills and topics-- the Traveling Tutor and the Challenge Chaser. The Traveling Tutor presents mini-lessons on a variety of topics: how to draw graphs and diagrams, how to write better reports, and more. The Challenge Chaser presents challenges for students to work: essay writing, information searches, spelling words and word puzzles. Smart Searcher helps you find information, either within the Alphabet Superhighway or on the WWW. Assisting teachers and parents in using site resources are a Teachers' Lounge and a Parents' Place. Within the Library, Exhibit Center, Teachers' Lounge, and Parents' Place, info is organized around Knowledge Neighborhoods, where general topics such as space, earth, peoples and cultures, and technology can be browsed.

The Cyberzine is an on-line magazine that offers topical articles, interviews, cartoons, news flashes, and more, all generated by upper elementary and high school students. The Library has bibliographies, links to other relevant Web sites, addresses where free materials can be obtained, and other age-appropriate resource materials. Teachers, parents, and librarians can visit the Teachers' Lounge to find lesson plans, curriculum guides, teaching tips, and links to other WWW instructional resources.

Exhibits, which are located in the Exhibit Center, are student-constructed displays of information on issues such as "Why did the dinosaurs disappear so suddenly?", "What did Ghengis Khan, Joan of Arc, and Abraham Lincoln eat for breakfast?", and "Why do people in Boston speak differently from people in Philadelphia?" Visit the top floor of the Exhibit Center and view the issues suggested for exhibits. The Newsgroup within the Teachers' Lounge will lead you to classes around the world that may be interested in cooperating on building exhibits. Then, browse the Teachers' Guide for Constructing Exhibits, found in the Teachers' Lounge, for suggestions on how to organize a class for doing an exhibit.

Exhibits and articles in the Cyberzine are developed by secondary and upper elementary classes, using templates and other resources that are available from the main site.

How can my class become involved?

If you would like to involve your class, club, or organization in building an exhibit, send an Email message to hwy@diderot.eds.udel.edu telling us who you are, what subject and issue you are interested in, and what access you have to the web. But first, browse the ASH and read some of the suggested issues for exhibits. These are, of course, only suggestions. The ASH is meant to support the school curriculum so pick a topic and set of issues that fit into your plans for the semester or year. Check out the Teachers' Guide for Constructing Exhibits in the Teacher's Lounge for suggestions on managing the activities leading to ASH exhibits. Your class might want to build one or more exhibits, or perhaps do a Cyberzine.

Obviously, there are more sites you will find over time.

There are also some you can look at for some cautions on problems related to introducing technology to schools and potential misuses of technology. For example, see:

www.benton.org/Library/Schools/ -- The Benton Foundation, a nonprofit group provides an overview of problems related to introducing technology to schools.

www.grinnell.edu/individuals/MONKE/ -- On the confronting Technology Web, Lowell W. Monke, a high school computer teacher, discusses concerns about use of technology in modern life and education.

www.realworld.org/ -- Learning in the Real World is a California-based not-for-profit group dedicated to promoting intelligent skepticism about technology's role in teaching.

www.oreilly.com/people/staff/stevet/netfuture/ -- In NETFUTURE, Steve Talbott, a book editor, urges consideration of the pernicious effects of computers on our lives in general and education in particular.

Stop, think, discuss

Access the Internet and explore a sample of the various resource sites listed above.

Home is where you hang your @.
Fax is truly stranger than fiction.
There is no place like http://www.home.com

Remember when:
a computer was something on a TV science fiction show ...
a window was something you hated to clean ...
a cd was a bank account ...
a web was a spider's home ...
and ram was the cousin of a goat.

A Few Related References*

Becker, H.J. (1999). *Internet use by teachers: Conditions of professional use and teacher-directed student use.* Irvine, CA: Center for Research on Information Technology and Organizations.

Duff, C. (2000). Online mentoring. *Educational Leadership, 58*, 49-52.

Fitzgerald, G.E. (1994). Using the computer with students with emotional and behavioral disorders. *Technology & Disability, 3,* 87-99. (Theme issue: Special education).

Hasselbring, T.S. & Williams Glasser, C.H. Use of technology to help students with special needs. *The Future of Children, 10.* 102-122.

Lindsey, J.D. (Ed). (1993). *Computers for exceptional individuals*. Second edition. Austin, TX. pro-ed.

Male, M. (1994). *Technology for inclusion: Meeting the special needs of all students.* Second edition. Needham Heights, MA Allyn & Bacon.

Martin, S.M., & Wienke, W.D. (1998).Using Cutting Edge Technology to Prepare Teachers to Work with Children and Youth Who Have Emotional/Behavioral Disorders. *Education and Treatment of Children, 21,* 385-395.

Means, B., & Olson, K. (1999). Technology's role in student-centered classrooms. In H. Walberg & H. Waxman (Eds.), *New directions for teaching practice and research.* Berkeley, CA: McCutchan.

Penuel, W.R., Means, B., & Simkins, M. (2000). The multimedia challenge. *Educational Leadership, 58*, 34-38.

Roschelle, J., Hoadley, C., Pea, R., Gordin, D., & Means, B. (2000). Changing how and what children learn in school with computer-based technologies. *The Future of Children, 10.* 76-101.

For a set of *Readings on the Use of Technology for Individuals With Disabilities* developed by the ERIC Clearinghouse on Disabilities and Gifted Education, see http://ericec.org/minibibs/eb16.htm

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

Using Our Center for Continuing Education & Distance Learning

Among the many resources you can access from our Center by computer, phone, or mail are:

- *our Website* -- http://smhp.psych.ucla.edu – where you will find a wealth of downloadable materials (including guidebooks), a gateway map of links to other key sites, access to our consultation cadre, organized responses to inquiries about topics related to addressing barriers to student learning and promoting healthy development, etc.;

- *newsletters* -- a quarterly thematic hardcopy newsletter which is archived on the Website; a monthly electronic newsletter *(ENEWS)* – which can be subscribed to by Email -- listserv@listserv.ucla.edu (Leave the subject line blank, and in the body of the message type: subscribe mentalhealth-L);

- *networking* -- we help interested individuals to develop networks and then establish listservs and other forms of communication with each other for purposes of learning and mutual support;

- *technical assistance* -- when you are having trouble finding info on providing special assistance for youngsters and their families or about systemic changes in schools related to addressing barriers to student learning and promoting healthy development, try our Website (e.g., see our Quick Find search feature). If you can't find what you need there, contact us by Email, phone, or mail.

Glossary

Address, E-mail
A combination of an individual username and domain name necessary for electronic messages to be routed to the proper computer system and placed in the proper e-mail box. The two names are separated by an '@'.

Address, Internet
Four numbers separated by dots ('dotted quad') which uniquely identifies a computer system connected to the Internet. For each address there is a domain name. Either the address or the domain name can be used to access an Internet host for remote login (telnet) or file transfer (ftp).

ASCII (American Standard Code for Information Interchange)
In word processing, it is used to refer to the Text Only file format, and is the most universal method for importing and exporting text between software programs.

BBS (electronic Bulletin Board System)
An announcement and conferencing facility implemented in hundreds of software packages and run on thousands of computers both individual and networked.

Browsability
Ability to move easily throughout a web site. As the information on the site grows so should the organization and classification of the items in the collection. (i.e., table of contents)

CGI (Common Gateway Interface)
CGI scripting has been around for a long time in Internet terms. When a Web user's computer (the client) contacts a server by typing in a URL, the server must respond in a standard way. This means that all servers must share a common language, CGI enables you to run programs, or offer access to images or information that are not part of its own programming.

Conferencing, Electronic
Any means of discussion among two or more people undertaken via computer and communication media. This includes video conferencing

Cyberspace
Used by networkers to refer to the vast, worldwide reservoir of information being transmitted or stored by internetworked computers.

Database, network
Any electronically stored and network-accessible collection of information.Network databases include collections of full-text documents, tables, lists, graphics, programs, etc.

Distance Learning
In its broader context, distance learning is a term used to describe instruction where teachers are physically or geographically separated from their students. Cable companies, instructional television stations and electronic transmissions via phone lines are all systems that currently deliver distance learning opportunities into the nation's classrooms. More commonly, satellite technology is used to deliver accredited courses where participants watch and interact with the programs via a television set in their school, classroom or home.

E-mail (Electronic mail)
Written messages transmitted across networks (or within the same computer) and usually accessible only by the addressee either by using an online mail user agent (mail reader) or by downloading for reading and other processing offline. Each message contains a header with routing, date and subject information and a body containing the message. Mail is sent from computer to computer via telecommunications media. E-mail packages available on the University systems include WebMail (for students), GroupWise (for departments with a Novell local area network), and Pine (mallard IT Sun server). Employees are encouraged to check with their Administrative Computing Coordinator or departmental Network Administrator for advice on choosing a mail package. WebMail on the IT Sun (Mallard) is generally recommended for students.

ERIC (Educational Resources Information Center)
A federally-funded national information system that provides access to an extensive body of education-related literature and bibliography. ERIC provides access via e-mail query, gopher server, telnet sites, and anonymous ftp sites.

FAQ (Frequently Asked Questions)
A compilation of the most often asked questions and answers on the topic covered by the newsgroup which maintains and updates the FAQ.

Font
Another name for a single typeface style. Several fonts can be part of a typeface family.

FTP (File Transfer Protocol)
The command (and process) for moving files or programs across the Internet from a remote server to your own host.

Freeware
Software you can download from the Web or FTP (File Transfer Protocol) site that doesn't require registration.

GIF (Graphics Interface Format)
A picture file compressed for fast downloading and uploading on the Internet.

Gopher
A text-only online information retrieval system on the Internet that has been widely replaced by the World-Wide Web. Software which permits searching files on remote hosts using layered menus. Text from these files can be read online or the files can be transferred to your computer.

HTML (HyperText Markup Language)
A text coding language for tagging text and graphics on a Web page. It identifies what's on a web page and how it will be rendered.

Information System
Any collection of organized value added data (i.e., books, billboards, libraries, world wide web server, etc.)

Inline plug-in
Software that adds something functional to another program, but can't stand alone as an application. it is external to your browser's own code, and is written by the companies that want their software readable on many platforms. A plug-in displays the work inside the browser, rather than in a separate viewer window.

Internet Service Provider
Also known as ISP, this can be any business or enterprise that acts as a middleman between the Internet and the connecting individual or agency. ISPs are usually geographically close to the connecting site and could vary from a commercial organization to a university. The ISP will assign the user an Internet "address" attaching their own domain name to the end of the code. It is this address which enables a user to receive mail.

ISP (Internet Service Provider)
Offer connections and services to the Internet and the World Wide Web. many providers offer free disk space on their servers, and you can use this storage option to upload your own Web site to the Internet.

Interactive Assistance
Customized help for particular users in particular situations beyond on-line help and how to's.

Interactive Technology
Refers to computer-based media that enable users to access information and services of interest, control how the information is presented, and respond to information and messages in the mediated environment (e.g., answer questions, send a message, take action in a game, receive feedback or a response to previous actions.)

Internet
A collection of networks and gateways around the world communicating via TCP/IP. Auburn University is connected to the Internet via the Alabama Research and Education Network.

Internet-ready
Refers to a computer which is not just capable of but actually connected to the Internet via a World-Wide Web browser.

Intranet
Set up by companies or organizations for their own internal use, and aren't open to the public. Intranets operate like the Internet and World Wide Web, but the content is specific to, and controlled by, the company that runs it.

IP address (Internet Protocol address)
The location of a particular connection to the Internet, expressed as four series of digits separated by dots. A computer connection registered with the DNS has a domain name associated with its IP address.

ISP(Internet Service Provider)
A company which offers dialup communication, including software for such services as e-mail, ftp, telnet, news, and Web browsing and publishing.

Java
Java, unlike JavaScript, is a complex, platform-independent programming language with built-in security and network communications capabilities which requires fairly extensive programming expertise to master. Java programs, or applets, can be launched from a Web browser, or run on a Web server, or may operate independently from the Web. Java is also increasingly being used for application programs, such as word processors, spreadsheets, and database front-ends and "push" media. See Miva.

JavaScript
JavaScript, unlike Java, is a simple scripting language for Netscape Navigator that allows Webspinners to easily add such interactive features as input checking, personalization, current date and time, and other special effects to their Web pages. JavaScript requires no development tools, can be combined with HTML and is interpreted directly by the browser without burdening the resources of the server. Both Java and JavaScript are object-oriented languages.

List server
An electronic mailing list. Everyone on the list receives every message that is sent by any of the subscribers. Instructors often use list servers to facilitate communication among participants in a class.

Mailists
A conference/discussion group in which all messages are sent to one e-mail address from which they are redistributed to the e-mail boxes of everyone who has subscribed. All messages are expected to pertain to a specific topic. If moderated, messages will be reviewed before distribution.

Meta-search engines
Internet applications that allow you to input queries into a field, select various databases, and submit your query.

Modem
A device which connects between a computer and a phone line to translate between the digital signal of the computer and the analog signal required for telephone transmission.

Multimedia
The use of computers to present text, graphics, video, animation, and sound in an integrated way. Long touted as the future revolution in computing, multimedia applications were, until the mid-90s, uncommon due to the expensive hardware required. With increases in performance and decreases in price, however, multimedia is now commonplace. Nearly all PCS are capable of displaying video, though the resolution available depends on the power of the computer's video adapter and CPU. Because of the storage demands of multimedia applications, the most effective media are CD-ROMs.

Netscape
A World Wide Web browser

Newsgroup
An online forum for discussion of related topics, accessible by a newsreader. Some newsgroups allow postings or messages from anyone, while others are moderated (postings are screened).

Password
A code known only to the user ID owner which verifies his or her identity to a computing resource system. This code is usually 6-8 characters in length and should be a mix of numbers and letters (lower and upper case). The purpose of a password is to authenticate the user before gaining system access.

PDF
Portable Document Format. The file format of documents viewed and created by Adobe Acrobat software, developed as a standard format for Internet documents. Advantages of PDF are that it is totally "cross-platform" (viewable by computers on all operating systems) and that all graphics, formatting and page layout are faithfully preserved.

Readability
Connotes well-implemented graphic design and visual appeal or practicality.

Searchability
The function of a search is similar to the index of a book. The downside is that search engines require the users to articulate their information need in the terms of the system's query language.

Shareware
Low-cost software applications that you can download from the Web and FTP sites. These time limited demos require registration and payment of fees for long-term use.

SMTP (Simple Mail Transfer Protocol)
The Internet standard protocol for transferring electronic mail messages from one computer to another. SMTP specifies how two mail systems will interact and the format of control messages they exchange when transferring mail. It defines the details needed for e-mail servers around the world to communicate with each other.

Telecommunications
Long distance communications using electromagnetic systems - including wire (e.g. telephone or telegraph) and broadcast transmission (e.g. radio, television, or satellite).

URL (Uniform Resource Locator)
The electronic address for an information source on the Internet, such as an ftp site, gopher server, or Web page The format for specifying the address of an Internet document. The URL is made up of three parts: the Protocol *http*, the server name *www.company.com*, and the path of the document */ example/doc.html*

World-Wide Web (WWW or W3)
Avast collection of interconnected files and programs spanning the globe and retrievable via a client-server system utilizing hypertext. The Web is accessed by programs called browsers (e.g., Netscape or Internet Explorer). Users navigate the Internet by following links from document to document on computers located anywhere in the world. Web files are represented as hypertext (in HTML format) and linked to other documents by their URLs. The Web encompasses not only its native http protocol, but also ftp, nntp (news), gopher, and telnet. Newer browsers can deliver not only text and pictures, but sound, animation, and multimedia applications.

Glossary References:

Creating User-Friendly electronic Information Systems
by Eric Morgan.
Libraries of the Future, September 1997. pp 31-33.

Web Animation for Dummies
by Renee Le Winter & Cynthia L. Baron.
1997 IDG Books Worldwide.

California Department of Education
K-12 Network Technology Planning Guide
http://www.cde.ca.gov/ftbranch/retdiv/k12/ntpg/glossary.html

Auburn University, Technology Information Help Desk
http://www.auburn.edu/hotline/glossary.html

Module III

Objectives

The intent in this Unit is to help you learn more about:

(1) *what must be accomplished school-wide to address barriers to learning and teaching* (After going over the material, be sure you can identify five aspects involved in enhancing a school-wide enabling component.)

(2) *why school-community partnerships are needed* (After going over the material, be sure you can offer at least three reasons effective school-community partnerships are in a teacher's best interests.)

(3) *how boards of education deal with policies and practices for addressing barriers to students learning* (After going over the material, be sure you can describe why school boards need to pay more attention to this matter.)

There is no way to avoid the fact that better achievement requires more than good instruction and well-managed classrooms and schools.

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Module III:

Beyond the Classroom: Roles Teachers Must Play in Enhancing a Comprehensive Approach for Addressing Barriers to Learning

As should be evident by now, schools are concerned not only with promoting development and learning. To accomplish their educational mission, they must participate in efforts to prevent problems, respond quickly when problems first appear, and help those students who have severe, pervasive, and chronic problems.

Obviously, addressing barriers to learning and promoting healthy development is not the sole responsibility of the teacher. Indeed, as teachers learn more about how best to support and guide students who manifest commonplace behavior, learning, and emotional problems, the involvement of the school as a whole, the home, and the surrounding community is essential. Thus, teachers need to learn how to play a role in mobilizing such involvement.

The wise teacher advocates for and participates in planning and developing a comprehensive, multifaceted, and integrated approach at the school for addressing barriers to learning and promoting healthy development. As stated in Module I, this involves establishment of a fully functioning enabling component.

In this module, we cover the following topics. They are designed to help you think about your role in ensuring your school develops the type of school-wide enabling component that is essential to the success of your efforts in the classroom.

A. Needed: A School-Wide Enabling Component

1) Policy and Standards

2) Planning and Decision Making Tables

3) Infrastructure

4) Establishing School-Wide Program Priorities

5) Expanded Framework for School Accountability

B. Needed: School-Community Partnerships

C: Needed: Better Attention from the Board of Education on Addressing Barriers to Learning

D. Concluding Comments

Stop, think, discuss

What do you want the school as a whole to do to address factors that interfere with student learning and your efforts to teach?

A. Needed: A School-Wide Enabling Component

Although there are various other stakeholders involved, it is unlikely that a fully functioning enabling component can be developed at a school unless teachers really want it. It should be evident, by this point, why teachers should want such a component. But wanting is not enough.

The following pages offer a brief discussion of the role teachers need to play in ensuring systems beyond the classroom are doing what they should do. The discussion focuses on the role of teachers in

(1) convincing school decision makers to establish policy and standards for such a component and provide the resources for its development

(2) ensuring that an enabling component is given appropriate attention in the school's improvement plan and at decision making tables

(3) establishing the necessary infrastructure for the successful daily operation and ongoing development of an enabling component

(4) participating in establishing priorities and partnering in development of specific programs related to the six areas of an enabling component

(5) clarifying the importance of an expanded framework for school accountability that evaluates not only achievement, but personal and social development and efforts to address barriers to learning and does so in the context of indicators of community status.

1) Policy and Standards

Question:

Do schools need to do more to address barriers to learning so all children succeed?

Obvious answer:

Yes, BUT . . .

The *Yes* reflects the fact that schools have long recognized that their mission's success requires that they play a role in dealing with factors that interfere with youngsters' learning and performance.

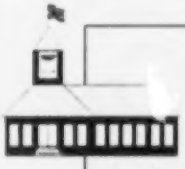
The *BUTs* are . . .

There's too much to do already and too little to do it with . . . .

There's never enough money . . . .

There's never enough staff to do what needs to be done, never enough space to house all we might want to do, and never enough time.

These concerns are all real. AND, schools still must find ways to do more and better in order to enhance educational results. Teachers are critical to the process. Their vision and commitment to new directions is essential. Their willingness to use existing resources in better ways also is essential.



If the school is to have a comprehensive enabling component, teachers must play a role in convincing school decision makers to establish policy and standards for such a component and provide the resources for its development.

All of this means changes in current policy at various levels – especially at the school level. As noted in Module I, current school reforms do not effectively address barriers to learning and teaching. Schools must quickly move to embrace new school-wide and community-oriented models for dealing with factors that interfere with learning and performance. Then, they must restructure use of existing education support personnel and resources in ways that ensure the new models are carried out effectively.

Teachers can help shape the necessary policies at their schools by stressing the need and proposing specific policy changes to meet the need.

As an aid, the Exhibit on the following page presents examples of some policy statements others have formulated to ensure that development of a comprehensive, multifaceted approach for enabling learning is placed on a par with other facets of school reform (e.g., reforms related to instruction and management).

Exhibit

Policy Statements

(1) One of the first schools to develop a policy statement upgrading efforts to develop a comprehensive, multifaceted approach for addressing barriers to learning was the Elizabeth Learning Center in Cudahy, California. This school is one of the demonstration sites for the Urban Learning Center Model which is one of the eight national comprehensive school reform models developed with support from the New American Schools Development Corporation. In the 1990s, the model incorporated and implemented the concept of a component to address barriers to learning as primary and essential and is proceeding to replicate it as one of the comprehensive school reforms specified in federal legislation. The school's governance body adopted the following policy statement:

> *We recognize that for some of our students, improvements in instruction/curricula are necessary but not sufficient. As the school's governance body, we commit to enhancing activity that addresses barriers to learning and teaching. This means the Elizabeth Learning Center will treat the Enabling Component on a par with its Instructional/Curriculum and Management/ Governance Components. In policy and practice, the three components are seen as essential and primary if all students are to succeed.*

(2) As part of its ongoing efforts to address barriers to learning, the California Department of Education has adopted the concept of Learning Supports. In its 1997 Guide and Criteria for Program Quality Review, the Department states:

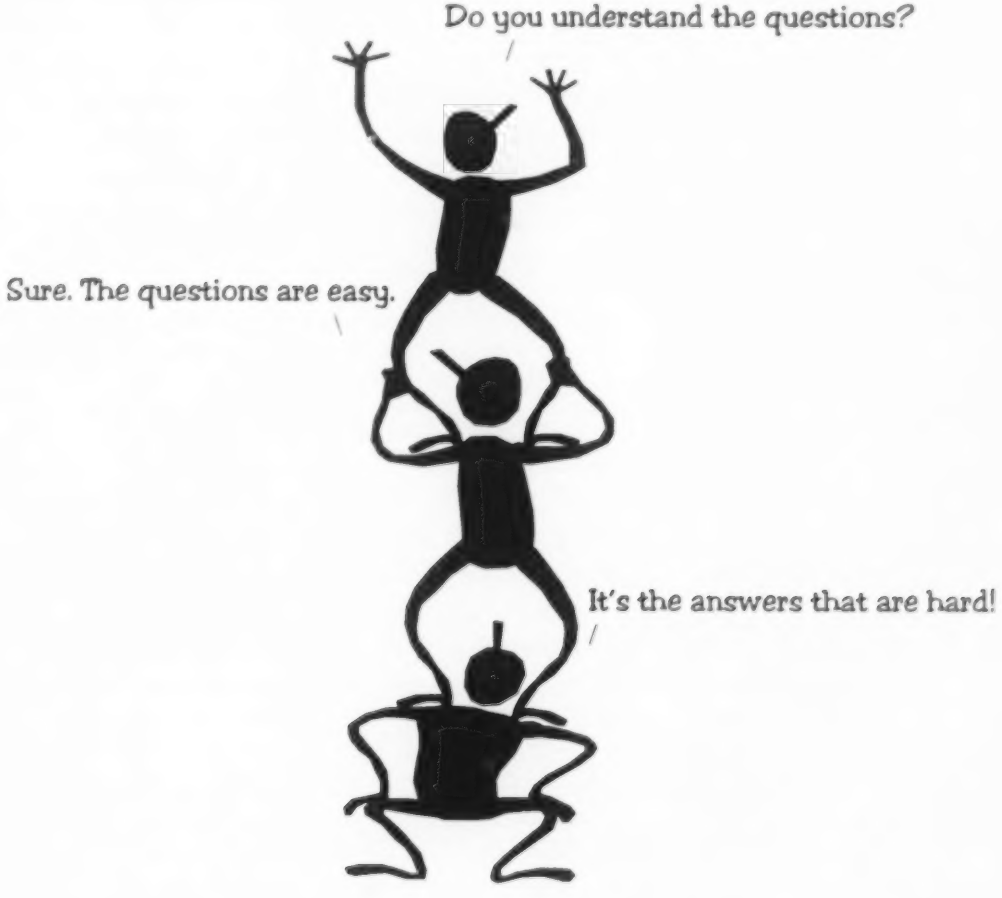
> *Learning support is the collection of resources (school, home, community), strategies and practices, and environmental and cultural factors extending beyond the regular classroom curriculum that together provide the physical, emotional, and intellectual support that every child and youth needs to achieve high quality learning.*

(3) In the early 1990s, the Los Angeles Unified School District began the task of restructuring its student support services. In 1998, the district's Board of Education resolved that a component to address barriers to student learning and enhance healthy development would be one of the primary and essential components of the District's educational reform.(A copy of the resolution is available from the Center on request.)

Given that school-reform across the country is "standards-based," it is imperative that school-wide approaches for addressing factors interfering with student learning delineate a set of standards and integrate them with instructional standards. Indeed, establishing *standards* for an enabling component is another facet of ensuring high levels of attention and support for development of a comprehensive, multifaceted approach for addressing barriers to learning.

As an aid in accomplishing this, the material in the following Exhibit is adapted from a set of standards, guidelines, and related quality indicators developed by the Memphis City Schools.

Once the standards are formulated, they must be thoroughly incorporated in every school's improvement plan. This is a necessary step toward making the policy commitment visible at every school, and it establishes the framework for ensuring relevant accountability.



Exhibit

Example of Standards for an Enabling Component

Standards for an Enabling or Learner Support Component

An *Enabling* or *Learner Support component* is an essential facet of a comprehensive school design. This component is intended to enable *all* students to benefit from instruction and achieve high and challenging academic standards. This is accomplished by providing a comprehensive, multifaceted, and integrated continuum of support programs and services at every school. The district is committed to supporting and guiding capacity building to develop and sustain such a comprehensive approach in keeping with these standards.

All personnel in the district and other stakeholders should use the standards to guide development of such a component as an essential facet of school improvement efforts. In particular, the standards should guide decisions about direction and priorities for redesigning the infrastructure, resource allocation, redefining personnel roles and functions, stakeholder development, and specifying accountability indicators and criteria.

The following are 5 major standards for an effective Enabling or Learner Support component:

Standard 1. *The Enabling or Learner Support component encompasses an evolving range of research-based programs and services designed to enable student learning and well-being by addressing barriers to learning and promoting healthy development.*

Standard 2. *The Enabling or Learner Support Component is developed, coordinated, and fully integrated with all other facets of each school's comprehensive school improvement plan.*

Standard 3. *The Enabling or Learner Support Component draws on all relevant resources at a school, in a family of schools, district-wide, and in the home and community to ensure sufficient resources are mobilized for capacity building, implementation, filling gaps, and enhancing essential programs and services to enable student learning and well-being and strengthen families and neighborhoods.*

Standard 4. *Learning supports are applied in ways that promote use of the least restrictive and nonintrusive forms of intervention required to address problems and accommodate diversity.*

Standard 5. *The Enabling or Learner Support Component is evaluated with respect to its impact on enabling factors, as well as increased student achievement.*

Meeting these standards is a shared responsibility. District and school leaders, staff, and all other concerned stakeholders work together to identify learning support needs and how best to meet them. The district and schools provide necessary resources, implement policies and practices to encourage and support appropriate interventions, and continuously evaluate the quality and impact of the Enabling/Learner Support Component.

Guidelines and Quality Indicators for Each Standard

Standard 1 encompasses a guideline emphasizing the necessity of having a full continuum of programs and services in order to ensure all students have an equal opportunity for success at school. Included are programs designed to promote and maintain safety, programs to promote and maintain physical and mental health, school readiness and early school-adjustment services, expansion of social and academic supports, interventions prior to referral for special services, and provisions to meet specialty needs.

Quality Indicators for Standard 1:

- All programs and services implemented are based on state of the art best practices for addressing barriers to learning and promoting positive development.
- The continuum of programs and services ranges from prevention and early-age intervention -- through responding to problems soon after onset -- to partnerships with the home and other agencies in meeting the special needs of those with severe, pervasive, or chronic problems.
- Routine procedures are in place to review the progress of the component's development and the fidelity of its implementation.

Standard 2 encompasses a guideline that programs and services should be evolved within a framework of delineated areas of activity (e.g., 5 or 6 major areas) that reflect basic functions schools must carry out in addressing barriers to student learning and promoting healthy development. A second guideline stresses that a school-based lead staff member and team should be in place to steer development of these areas at each school and ensure that all activities are implemented in an interdisciplinary well coordinated manner which ensures full integration into the instructional and management plan.

Quality Indicators for Standard 2:

- All programs/services are established with a delineated framework of areas of activity that reflect basic functions a school must have in place for addressing barriers to learning and promoting healthy development.
- At the school level, a resource-oriented team is functioning effectively as part of the school's infrastructure with responsibility for ensuring resources are deployed appropriately and used in a coordinated way. In addition, the team is facilitating (a) capacity building, (b) development, implementation, and evaluation of activity, and (c) full integration with all facets of the instructional and governance/management components.
- Routine procedures are in place to ensure all activities are implemented in a manner that coordinates them with each other and integrates them fully into the instructional and governance/management components.
- Ongoing professional development is (a) provided for all personnel implementing any aspect of the Enabling/Learner Support Component and (b) is developed and implemented in ways that are consistent with the district's Professional Development Standards.

Guidelines and Quality Indicators for Each Standard (cont.)

Standard 3 encompasses a guideline underscoring that necessary resources must be generated by redeploying current allocations and building collaborations that weave together, in common purpose, families of schools, centralized district assets, and various community entities.

Quality Indicators for Standard 3:

- Each school has mapped and analyzed the resources it allocates for learner support activity and routinely updates its mapping and analysis.
- All school resources for learner supports are allocated and redeployed based on careful analysis of cost effectiveness.
- Collaborative arrangements for each family of schools are in place to (a) enhance effectiveness of learner supports and (b) achieve economies of scale.
- Centralized district assets are allocated in ways that directly aid capacity building and effective implementation of learner support programs and services at school sites and by families of schools.
- Collaborative arrangements are in place with a variety of community entities to (a) fill gaps in the Enabling/Learner Support Component, (b) enhance effectiveness, and (c) achieve economies of scale.

Standard 4 encompasses guidelines highlighting that enabling or learner support activity should be applied in all instances where there is need and should be implemented in ways that ensure needs are addressed appropriately, with as little disruption as feasible of a student's normal involvement at school.

Quality Indicators for Standard 4:

- Procedures are in routine use for gathering and reviewing information on the need for specific types of learner support activities and for establishing priorities for developing/implementing such activity.
- Whenever a need is identified, learner support is implemented in ways that ensure needs are addressed appropriately and with as little disruption as feasible of a student's normal involvement at school.
- Procedures are in routine use for gathering and reviewing data on how well needs are met; such data are used to inform decisions about capacity building, including infrastructure changes and personnel development.

Standard 5 encompasses a guideline for accountability that emphasizes a focus on the progress of students with respect to the direct enabling outcomes each program and service is designed to accomplish, as well as by enhanced academic achievement.

Quality Indicators for Standard 5:

- Accountability for the learner support activity focuses on the progress of students at a school site with respect to both the direct enabling outcomes a program/service is designed to accomplish (measures of effectiveness in addressing barriers, such as increased attendance, reduced tardies, reduced misbehavior, less bullying and sexual harassment, increased family involvement with child and schooling, fewer referrals for specialized assistance, fewer referrals for special education, fewer pregnancies, fewer suspensions, and dropouts), as well as academic achievement.
- All data are disaggregated to clarify impact as related to critical subgroup differences (e.g., pervasiveness, severity, and chronicity of identified problems).
- All data gathered on learner support activity are reviewed as a basis for decisions about how to enhance and renew the Enabling/Learner Support Component.

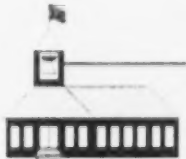
2) Planning and Decision Making Tables

With increasing recognition of the essential nature of developing a comprehensive, multifaceted approach for addressing barriers to learning, teachers and their representatives are realizing how marginalized education support programs have been. Establishing policy for an enabling component clearly is a necessary step teachers can take in changing this status.

Another task involves being certain that the agenda for every school planning and decision making session includes items related to the school's enabling component. Currently, such agendas focus mainly on instruction and sometimes on school governance and resource management. It is in every teacher's and student's interest to broaden these agendas.

The process for doing so is a straight forward one. What teachers can do is strongly indicate that planning agendas at the school must include a focus on developing strategic plans related to an enabling component. And, whenever there are discussions of priorities and resource allocation and reallocation, teachers must resist the temptation to undermine the strategic plan. That is, the temptation will be to think primarily in terms of classroom priorities and not about school-wide programs that enable teachers to do their job more effectively. Your understanding of the value of a school-wide enabling component makes you a critical person for helping others at the school maintain a balanced perspective as agenda items are discussed.

You will also be a key person in helping to expand the stakeholders who are participating at the relevant planning and decision making tables. Every school has some personnel whose job in some way affects how the schools addresses barriers to learning (e.g., pupil service personnel, student support staff). Such personnel rarely are invited to the table. This means their special expertise is missing in planning discussions. It also means that key advocates for essential programs are absent when decisions are made. Here, too, the task is straight forward. It involves teachers strongly indicating that such personnel should be invited to the table.



If the school is to have a comprehensive enabling component, teachers must play a role in ensuring that such a component is given appropriate attention in the school's improvement plan and at decision making tables.

3) Infrastructure

To ensure development of essential programs for addressing barriers to learning and teaching, the necessary infrastructure must be put in place. In most settings, this can be done through proper redeployment and restructuring of existing resources.

One way to conceive the infrastructure is in terms of key personnel and teams. For example, most schools do not have an administrator whose job definition outlines the leadership role and functions necessary for developing a comprehensive approach for addressing barriers to learning. This is not a role for which most principals have time. Thus, teachers who want a school-wide enabling component will find it imperative to advocate for a *site administrative leader* for this component. Such a role may be created by redefining a percentage (e.g., 50%) of a vice/assistant principal's day or, in schools that are too small to have such personnel, the principal might delegate some administrative responsibilities to a coordinator.

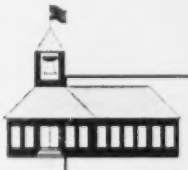
A *staff lead* is also useful. Such a person can be identified from the cadre of line staff who have expertise with respect to addressing barriers to student learning. If a site has a Center facility (e.g., Family or Parent Resource Center or a Health Center), the Center coordinator might fill this role.

Besides facilitating the development of a potent component to address barriers to learning, both the administrative and staff lead play key roles in daily implementation, monitoring, and problem solving.

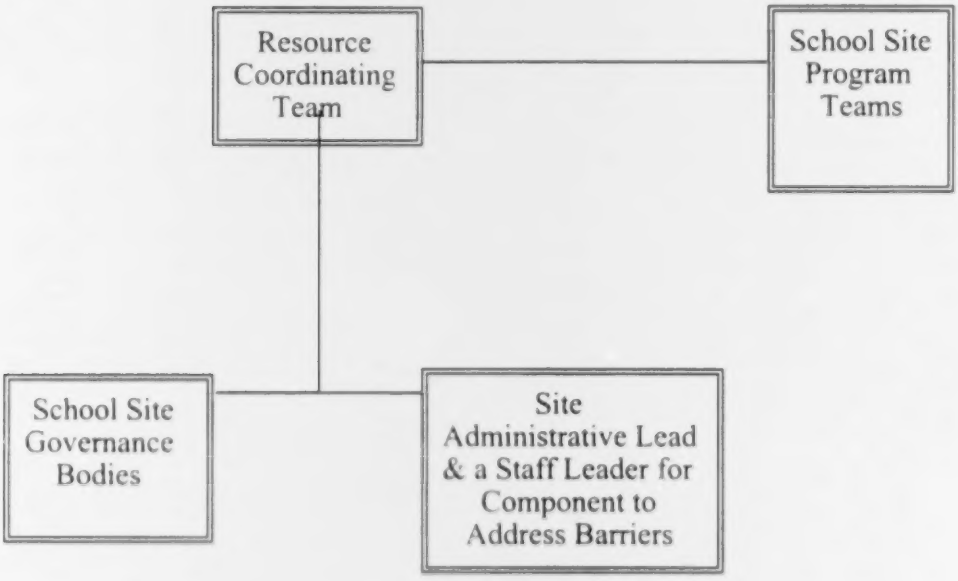
Most schools have a team that focuses on individual students who are having problems. (Such a team may be called a student study team, student success team, student assistance team, teacher assistance team, and so forth.) In addition to this type of a team, a separate on-site organizational mechanism for resource coordination is needed to address overall cohesion among programmatic areas. Such a school-based *Resource Coordinating Team* can reduce fragmentation and enhance cost-efficacy of enabling activity by ensuring all such activity is planned, implemented, and evaluated in a coordinated and increasingly integrated manner. Properly constituted, this group also provides on-site leadership for efforts to address barriers comprehensively and ensures the maintenance and improvement of a multifaceted and integrated approach (see related reading).

Both the *administative lead* and the *staff lead* must sit on the Resource Coordinating Team. The former must then represent and advocate the team's recommendations whenever the school's administrative team meets. Both *leads* must advocate for the team's recommendations at governance body meetings when decisions are made regarding programs and operations -- especially decisions about use of space, time, budget, and personnel.

Finally, development of specific programs requires the attention of *school-based program teams*. The functions of such teams are to ensure programmatic activity is well-planned, implemented, evaluated, maintained, and evolved. In forming such teams, identifying and deploying enough committed and able personnel may be difficult. Initially, a couple of motivated and competent individuals can lead the way in a particular program area -- with others recruited over time as necessary and/or interested. Some "teams" might even consist of one individual. In some instances, one team can address more than one programmatic area or may even serve more than one school. Many schools, of course, are unable to simultaneously establish "teams" to cover all six areas of an enabling component. As discussed next, such schools must establish priorities and plans for how they will phase in their enabling programs. (Again for a sense of the six areas, see Module I and the surveys in the resource aid packet that accompanies these continuing education modules.)



If the school is to have a comprehensive enabling component, teachers must play a role in ensuring that establishing the necessary infrastructure for the successful daily operation and ongoing development of such a component.

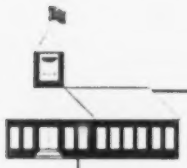

Resource Coordinating Team
School Site Program Teams
School Site Governance Bodies
Site Administrative Lead & a Staff Leader for Component to Address Barriers

4) Establishing School-Wide Program Priorities

It is evident that developing a comprehensive, school-wide enabling component requires patience and perserverance. In phasing in such a component, program development priorities must be established. The initial emphasis, of course, should be on meeting the school's most pressing needs.

You will want to play a very active role in developing such priorities.

The Exhibit on the following pages lists some examples of areas that you may want to consider first. These reflect what teachers in other schools have found to be important priorities.



If the school is to have a comprehensive enabling component, teachers must play a role in participating in establishing priorities and partnering in developing specific programs related to the six areas of such a component.

Exhibit

Examples of Areas Teachers Might Want to Designate as First Priorities in Developing an Enabling Component

(1) *Classroom-Focused Enabling*

Clearly the primary focus in addressing barriers to student learning is on ongoing inservice for teachers -- as reflected in this set of continuing education modules.

With respect to the other five programmatic areas, the efforts of a classroom teacher can be greatly enhanced by setting as priorities development of the following:

(2) *Support for Transitions*

Many schools need to enhance their positive "climate" for everyone – students, staff, families, others in the community. In particular, they can significantly reduce learning, behavior, and emotional problems by ensuring three types of transition programs are well developed.

>Welcoming and Social Support Programs for Everyone

The greater the rate of student and staff mobility, the greater the priority for pursuing strategies to enhance welcoming and social support. A positive welcome is desirable at the various initial encounters school staff have with a new student and family, a new staff member, and all visitors. Each point of contact represents an opportunity and a challenge to positively assimilate newcomers into the school -- welcoming them, linking them with appropriate social supports, assisting them to make successful transitions, and identifying and providing additional assistance for those who are having difficulty adjusting. It is risky business for a school not to have programs that fully orient newcomers (students, family, staff), connect them with specific peers (e.g., peer buddies), orchestrate their entrance into ongoing groups and activities, and so forth (see the Center's introductory packet entitled: *What Schools Can Do to Welcome and Meet the Needs of All Students and Families*).

>Articulation Programs

Many students have difficulty making the transition from grade-to-grade and many more have difficulty going from elementary to middle school or from middle to high school. Indeed, many "dropouts" occur during transitions to high school. Programs are needed that (a) provide all students with opportunities to prepare themselves psychologically for such changes and (b) identify and intervene on behalf of any student who is having difficulty during the actual period of transition. Comparable programs are useful for family members and new staff.

>Before, During, and After School Recreation, Academic Support, & Enrichment, Programs

Many schools have significant problems with tardies, bullying, substance abuse, and other forms of behavior that contribute to poor student performance. Well-designed and structured recreation and enrichment are basic to encouraging proactive behavior. Offered before school they lure students to school early and thus reduce tardies. Offered at lunch, they can reduce the incidence of harassment and other negative interactions. After school, they provide alternatives to antisocial interactions in the community, and paired with positive opportunities for enriched and personalized academic support, they offer renewed hope for those who have learning problems.

(cont.)

Exhibit (cont.)

Examples of Areas Teachers Might Want to Designate as First Priorities in Developing an Enabling Component

(3) ***Home Involvement in Schooling***

Besides what the school already is doing to enhance home involvement, there should be an intensive, proactive, positive outreach program aimed at families housing students who are experiencing learning, behavior, and emotional problems. Such activity should be accompanied by a commitment to minimizing negative contacts with family members (blaming and finger-waving).

>***Programs to strengthen the family***

It is rarely a mystery as to what family members need and would value from the school. In outreaching to attract family members to the school, the first priority should be development of programs and services related to the area of Student and Family Assistance (see below).

(4) ***Emergency/Crisis Response and Prevention***

>***Response Plan & Crisis Team***

Every school probably has a written crisis response plan. For such a plan to be viable and in order to pursue an enhanced focus on preventing crises, a strong priority should be to establish and build the capability of a Crisis Team.

(5) ***Student and Family Assistance***

While a wide range of assistance programs and services can be developed over the years, the first priorities in this area are:

>***Establishing access to emergency assistance for basic life needs*** (e.g., food, clothes, shelter, safety, emergency health care and dentistry, legal aid)

This usually involves identifying appropriate referral agencies and establishing direct links to them to facilitate family access.

>***Literary and extra academic support program*** (e.g., family literacy, tutors, GED preparation, ESL classes, related software for computers)

>***Social and emotional counseling*** (support groups, individual and group counseling)

(6) ***Community Outreach***

>***Volunteer recruitment program*** (e.g., parents, college students, senior citizens, mentors from the business community)

5) Expanded Framework for School Accountability

As with many other efforts to push reforms forward, policy makers want a quick and easy recipe to use. Most of the discussion around accountability is about making certain that program administrators and staff are held accountable. Little discussion wrestles with how to maximize the benefits (and minimize the negative effects) of accountability efforts. As a result, in too many instances the tail is wagging the dog, the dog is getting dizzy, and the public is not getting what it needs and wants.

School accountability is a good example of the problem. Policy makers want schools, teachers, and administrators (and students and their families) held accountable for higher academic achievement.

As measured by what?

As everyone involved in school reform knows, the only measure that really counts is achievement test scores. These tests drive school accountability, and what such tests measure has become the be-all and end-all of what school reformers attend to. This produces a growing disconnect between the realities of what it takes to improve academic performance and where many policy makers and school reformers are leading the public.

This disconnect is especially evident in schools serving what are now being referred to as "low wealth" families. Such families and those who work in schools serving them have a clear appreciation of many barriers to learning that must be addressed so that the students can benefit from the teacher's efforts to teach. They stress that, in many schools, major academic improvements are unlikely until comprehensive and multifaceted programs/services to address these barriers are developed and pursued effectively.

At the same time, it is evident to anyone who looks that there is no direct accountability for whether these barriers are addressed. To the contrary, when achievement test scores do not reflect an immediate impact for the investment, efforts essential for addressing barriers to development and learning often are devalued and cut.

Thus, rather than building the type of comprehensive, multifaceted, and integrated approach that can produce improved academic performance, prevailing accountability measures are pressuring schools to maintain a narrow focus on strategies whose face validity suggests a direct route to improving instruction. The implicit underlying assumption of most of these teaching strategies is that students are motivationally ready and able each day to benefit from the teacher's instructional efforts. The reality, of course, is that in too many schools the *majority* of youngsters are not motivationally ready and able and thus are not benefitting from the instructional improvements. For many students, the fact remains that there are a host of external interfering factors.

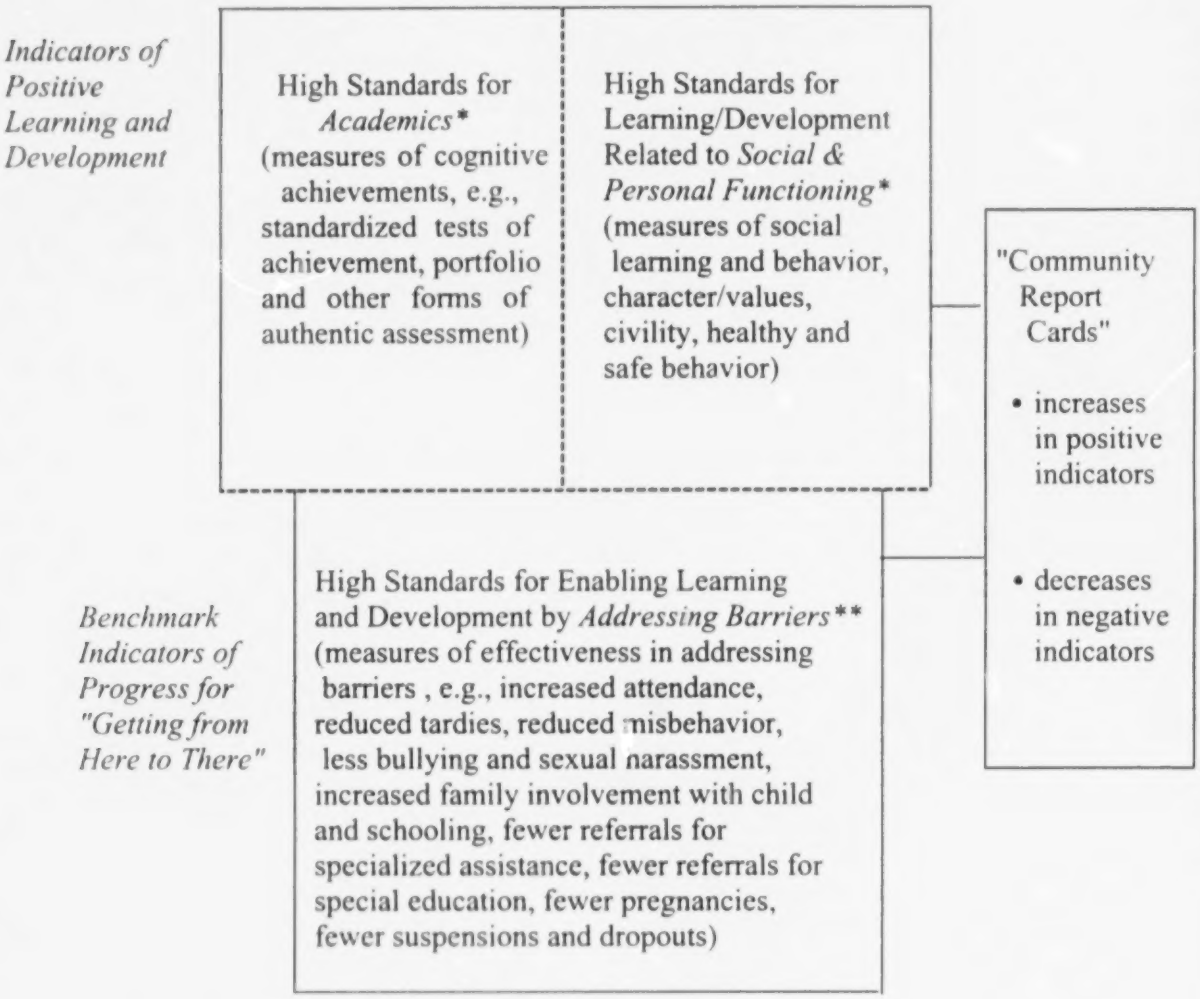
Logically, well designed, systematic efforts should be directed at addressing such factors. However, current accountability pressures override the logic and result in the marginalization of almost every initiative that is not seen as directly (and quickly) leading to academic gains.

Ironically, not only does the restricted emphasis on achievement measures work against the logic of what needs to be done, it works against gathering evidence on how essential and effective it is to address barriers to learning directly.

All this leads to an appreciation of the need for an expanded framework for school accountability. A framework that includes direct measures of achievement and much more. The figure on the following page highlights such an expanded framework.

Stand still and
silently wait for
the world to go by -
and it certainly will!

Figure: ***Expanding the Framework for School Accountability***


Indicators of Positive Learning and Development
High Standards for Academics* (measures of cognitive achievements, e.g., standardized tests of achievement, portfolio and other forms of authentic assessment)
High Standards for Learning/Development Related to Social & Personal Functioning* (measures of social learning and behavior, character/values, civility, healthy and safe behavior)
"Community Report Cards"
• increases in positive indicators
• decreases in negative indicators
Benchmark Indicators of Progress for "Getting from Here to There"
High Standards for Enabling Learning and Development by Addressing Barriers** (measures of effectiveness in addressing barriers , e.g., increased attendance, reduced tardies, reduced misbehavior, less bullying and sexual narassment, increased family involvement with child and schooling, fewer referrals for specialized assistance, fewer referrals for special education, fewer pregnancies, fewer suspensions and dropouts)

*Results of interventions for directly facilitating development and learning.

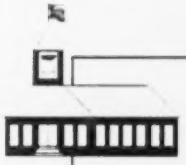
**Results of interventions for addressing barriers to learning and development.

Few would argue with the notion that ultimately school reform must be judged in terms of whether the academic performance of students improves significantly (approaching "high standards"). At the same time, it is essential that accountability encompasses all facets of a comprehensive and holistic approach to facilitate and enable development and learning.

Such an approach comprises programs designed to achieve high standards for learning related to social and personal functioning and those designed to address barriers to student learning. Currently, efforts in these arenas are given short shrift because they are not part of the accountability framework.

To be more specific, it is clear that concerns about social learning and behavior, character/values, civility, healthy and safe behavior, and other facets of youth development are not included when school accountability is discussed. Similarly, school programs/services designed to address barriers to student learning are not attended to in a major way in the prevailing accountability framework.

We suggest that "getting from here to there" in improving academic performance also requires expanding the accountability framework to include high standards and related accountability for activity to enable learning and development by addressing barriers. Among the accountability indicators ("benchmarks") for such programs are increased attendance, reduced tardies, reduced misbehavior, less bullying and sexual harassment, increased family involvement with child and schooling, fewer referrals for specialized assistance, fewer referrals for special education, and fewer pregnancies, suspension, and dropouts.



If the school is to have a comprehensive enabling component, teachers must play a role in clarifying the importance of an expanded framework for school accountability that evaluates not only achievement, but personal and social development and efforts to address barriers to learning and does so in the context of indicators of community status.

B. Needed: School-Community Partnerships

Learning is neither limited to what is formally taught nor to time spent in classrooms. It occurs whenever and wherever the learner interacts with the surrounding environment. All facets of the community (not just the school) provide learning opportunities. Anyone in the community who wants to facilitate learning might be a contributing teacher. This includes aides, volunteers, parents, siblings, peers, mentors in the community, librarians, recreation staff, college students, etc. They all constitute what can be called the teaching community. When a school successfully joins with its surrounding community, everyone has the opportunity to learn and to teach.

Most schools do their job better when they are an integral and positive part of the community. Unfortunately, schools and classrooms often are seen as separate from the community in which they reside. This contributes to a lack of connection between school staff, parents, students, and other community residents and resources. For schools to be seen as an integral part of the community, steps must be taken to create and maintain collaborative partnerships. Potential benefits include enhanced community participation, student progress, and community development.

> *For teachers, it is in their best interests to advocate for greater outreach to community resources. At the same time, the emphasis in doing so should always be on those resources that can help fill gaps in programs the school has set as priorities.*

As already stressed, a good place to start is with community volunteers. Greater volunteerism on the part of parents, peers, and others from the community can break down barriers and helps increase home and community involvement in schools and schooling. Thus, a major emphasis in joining with the community is establishment of a program that effectively recruits, screens, trains, and nurtures volunteers. In addition, we all must work toward increased use of school sites as places where parents, families, and other community residents can engage in learning, recreation, enrichment, and find services they need.

David Hornbeck was quite effective in increasing volunteerism and community support during his tenure as Superintendent of Schools in Philadelphia. When asked how he had done it, he stated: "We used three primary strategies: a) we simply asked people to help us; b) we had training for the volunteers; and c) we had important things for the volunteers to do."

Exhibit
About School-Community Collaborations

In recent years, there has been increasing interest in school-community collaborations as one way to provide more support for schools, students and families. This interest is bolstered by the renewed policy concern about countering widespread fragmentation of community health and social services and by the various initiatives for school reform, youth development, and community development. In response to growing interest and concern, various forms of school-community collaborations are being tested, including statewide initiatives in California, Florida, Kentucky, Missouri, New Jersey, Ohio, and Oregon, among others. This movement has fostered such concepts as school linked services, coordinated services, wraparound services, one-stop shopping, full service schools, and community schools.

The contemporary literature on school-community collaborations is heavy on advocacy and prescription and light on data. Each day brings more reports from projects such as New Jersey's School-Based Youth Services Program, the Healthy Start Initiative in California, the Children's Aid Society Community Schools and the Beacons Schools in New York, Communities-in-Schools, Caring Communities in Missouri, and the Family Resource and Youth Services Centers in Kentucky. Not surprisingly, the reports primarily indicate how hard it is to establish collaborations. Still, a reasonable inference from available data is that school-community collaborations can be successful and cost effective over the long-run.

By placing staff at schools, community agencies make access easier for students and families, especially those who usually are underserved and hard to reach. Such efforts not only provide services, they seem to encourage schools to open their doors in ways that enhance recreational, enrichment, and remedial opportunities and greater family involvement. Analyses of these programs suggest better outcomes are associated with empowering children and families, as well as with having the capability to address diverse constituencies and contexts. Families using school-based centers are described as becoming interested in contributing to school and community by providing social support networks for new students and families, teaching each other coping skills, participating in school governance, and helping create a psychological sense of community. It is evident that school-community collaborations have great potential for enhancing school and community environments and outcomes.

(Note: For more on this, see the Center's *School-Community Partnerships: A Guide*)

C. Needed: Better Attention from the Board of Education on Addressing Barriers to Learning

For too long, school board's have dealt with barriers to learning on an ad hoc and often emergency basis. The result is a hodge-podge of fragmented and marginalized policies that reduce the impact of programs and services designed to enable learning and promote healthy development.

School boards need to revisit all this;
and encouraging them to do so is in teachers' best interests.

Our Center has produced a report entitled *Restructuring Boards of Education to Enhance Schools' Effectiveness in Addressing Barriers to Student Learning*. The report incorporates lessons learned from a unique standing committee established by the Los Angeles Unified School District's Board of Education in the mid 1990s.

The following brief excerpt from the report is intended to help you think about what you might propose to your board. *One way to do this is to obtain a copies of this report from our Center to share with other stakeholders and to send to members of the school board.*

"The Board meeting is called to order:
the problem for today is whether
to hire 3 security guards or 2 teachers."

Excerpt from: *Restructuring Boards of Education to Enhance Schools' Effectiveness in Addressing Barriers to Student Learning*

Rethinking a School Board's Current Committee Structure

Most school boards do not have a standing committee that gives full attention to the problem of how schools address barriers to learning and teaching. This is not to suggest that boards are ignoring such matters. Indeed, items related to these concerns appear regularly on every school board's agenda. The problem is that each item tends to be handled in an ad hoc manner, without sufficient attention to the "Big Picture." One result is that the administrative structure in most districts is not organized in ways that coalesce its various functions (programs, services) for addressing barriers. The piecemeal structure reflects the marginalized status of such functions and both creates and maintains the fragmented policies and practices that characterize efforts to address barriers to student learning.

Analyzing How the Committee Structure Handles Functions Related to Addressing Barriers

Given that every school endeavors to address barriers to learning/teaching, school boards should carefully analyze how their committee structure deals with these functions. Because boards already have a full agenda, such an analysis probably will require use of an ad hoc committee. This committee should be charged with clarifying whether the board's structure, time allotted at meetings, and the way the budget and central administration are organized allow for a thorough and cohesive overview of all functions schools pursue to enable learning and teaching. In carrying out this charge, committee members should consider the work of all pupil services staff (e.g., psychologists, counselors, nurses, social workers, attendance workers), compensatory and special education, safe and drug free schools programs, dropout prevention, aspects of school readiness and early intervention, district health and human service activities, initiatives to link with community services, and more. Most boards will find (1) they don't have a big picture perspective of how all these functions relate to each other, (2) the current board structure and processes for reviewing these functions do not engender a thorough, cohesive approach to policy, and (3) functions related to addressing barriers to learning are distributed among administrative staff in ways that foster fragmentation.

> *If this is the case, the board should consider establishing a standing committee to focus indepth and consistently on the topic of how schools in the district can enhance their efforts to improve instruction by addressing barriers in more cohesive and effective ways.*

(cont).

Excerpt (cont.)

What a Standing Committee Can Do

The primary assignment for the committee is to develop a comprehensive policy framework to guide reforms and restructuring so that *every school* can make major improvements in how it addresses barriers interfering with the performance and learning of its students. Developing such a framework requires revisiting existing policy with a view to making it more cohesive and, as gaps are identified, taking steps to fill them.

Current policies, practices, and resources must be well-understood. This requires using the lens of addressing barriers to learning to completely map all district owned programs, services, personnel, space, cooperative ventures with community agencies, and so forth. The mapping process should differentiate between (a) regular, long-term programs and short-term projects, (b) those that have the potential to produce major results and those likely to produce superficial outcomes, and (c) those designed to benefit all or most students at every school site and those designed to serve a small segment of the district's students. In looking at income, in-kind contributions, and expenditures, it is essential to distinguish between "hard" and "soft" money (e.g., the general funds budget, categorical and special project funds, other sources that currently or potentially can help underwrite programs). It is also useful to differentiate between long- and short-term soft money. It has been speculated that when the various sources of support are totaled in certain schools as much as 30% of resources may be going to address barriers to learning. Reviewing the budget through this lens is essential in moving beyond speculation about such matters.

Because of the fragmented way policies and practices have been established, there is inefficiency and redundancy, as well as major gaps in efforts to address barriers. Thus, a logical focus for analysis is how to reduce fragmentation and fill gaps to increase effectiveness and efficiency. Another aspect of the analysis involves identifying activities that have little or no effects; these represent resources that can be redeployed to help underwrite the costs of filling major gaps.

A framework that clarifies the district's total approach for addressing barriers to learning should be formulated to guide long-term strategic planning. A well-developed framework is an essential tool for evaluating all proposals in ways that minimize fragmented and piecemeal approaches. It also provides guidance in outreaching to link with community resources in ways that fill gaps and complement school programs and services. That is, it helps avoid creating a new type of fragmentation by clarifying cohesive ways to weave school and community resources together.

The above tasks are not simple ones. And even when they are accomplished, they are insufficient. The committee must also develop policy and restructuring proposals that enable substantive systemic changes. These include capacity building strategies (e.g., administrative restructuring, leadership development, budget reorganization, creating stakeholder readiness for changes, well-trained change agents, strategies for dealing with resistance to change, initial and ongoing staff development, monitoring and accountability).

(cont.)

Excerpt (cont.)

To achieve economies of scale, proposals can capitalize on the natural connections between a high school and its feeders (or a "family" of schools). Centralized functions should be redefined and restructured to ensure that central offices/units support what each school and family of schools is trying to accomplish.

The nature of the work calls for a committee that includes

- one or more board members who chair the committee (all board members are welcome and specific ones are invited to particular sessions as relevant)
- district administrator(s) in charge of relevant programs (e.g., student support services, Title I, special education)
- several key district staff members who can represent the perspectives of principals, unions, and various other stakeholders
- nondistrict members whose jobs/expertise (e.g., in public and mental health, social services, recreation, juvenile justice, post secondary schools) make them invaluable contributors to the tasks at hand .

To be more specific:

It helps if more than one board member sits on the committee to minimize proposals being contested as the personal/political agenda of a particular board member.

Critical information about current activity can be readily elicited through active participation of a district administrator (e.g., a deputy or associate superintendent) responsible for student "support" programs or other district programs that address barriers to learning.

Similarly, a few other district staff usually are needed to clarify how efforts are playing out at schools across the district and to ensure that site administrators, line staff, and union concerns are discussed. Also, consideration should be given to including representatives of district parents and students.

Finally, the board should reach out to include members on the standing committee from out-side the district who have special expertise and who represent agencies that are or might become partners with the district in addressing barriers to learning. For example, in the Los Angeles Unified School District, the committee included key professionals from post secondary institutions, county departments for health and social services, public and private youth development and recreation organizations, and the United Way. The organizations all saw the work as highly related to their mission and were pleased to donate staff time to the committee.

The committee's efforts will be for naught, however, if their work is not a regular topic on the board's agenda and a coherent section of the budget. Moreover, the board's commitment must be to addressing barriers to learning in powerful ways that enable teachers to be more effective -- as contrasted to a more limited commitment to providing a few mandated services or increasing access to a few more services through developing coordinated/ integrated school-linked services.

D. Concluding Comments

In many schools, major improvements in students' achievement continue to be hampered by the deficiencies of school-wide approaches for addressing barriers to learning and teaching. Clearly, establishment of *comprehensive, multifaceted, and integrated* school-wide approaches is not an easy task. Indeed, it is likely to remain an insurmountable task until school reformers accept the reality that a comprehensive enabling component is essential and does not represent an agenda separate from a school's instructional mission. In terms of policy, practice, and research, all enabling activity, including the many categorical programs funded to deal with designated problems, must be seen as embedded in a cohesive continuum of interventions that provide the foundation for this essential component of school and community reforms.

With appropriate policy in place, work can advance with respect to *restructuring, transforming, and enhancing* school-owned programs and services and community resources, and include mechanisms to coordinate and eventually integrate it all. To these ends, the focus needs to be on *all* school resources (e.g., compensatory and special education, support services, adult education, recreation and enrichment programs, facility use) and *all* community *resources* (e.g., public and private agencies, families, businesses; services, programs, facilities; volunteers, professionals-in-training).

The ultimate aim is to weave all resources together into the fabric of every school and evolve a comprehensive component that effectively addresses barriers to development, learning, and teaching. Once policy makers recognize the essential nature of such a component, it will be easier to weave together all efforts to address barriers and, in the process, elevate the status of programs to enhance healthy development. Furthermore, when resources are combined properly, the *end product* can be cohesive and potent *school-community partnerships*. Such partnerships seem essential if we are to strengthen neighborhoods and communities and create caring and supportive environments that maximize learning and well-being.

> *As we have stressed in this Module, teachers at every school can and should play a major role in ensuring their school and utlimately their school district establishes policy for development of an effective component to address barriers to student learning.*

We must indeed all hang together,
or most assuredly we shall all hang separately.
Benjamin Franklin

Stop, think, discuss

Discuss ways you can play a role in influencing how your school works to enhance a comprehensive approach for addressing barriers to student learning.

If you want to read more about the need for a Resource Coordinating Team at each school and how it fits into the rest of the infrastructure for a component to address barriers to learning, see the brief reading that has been included in the accompanying materials. Also included is a brief reading on enhancing working relationships

Treat people as if they were
what they ought to be
and you help them become
what they are capable of being.

Goethe

A Few Related References*

Adelman, H. S. (1996). Restructuring education support services and integrating community resources: Beyond the full service school model. *School Psychology Review, 25*, 431-445.

Adelman, H.S., Reyna, C., Collins, R., Onghai, J., & Taylor, L. (1999). Fundamental concerns about policy for addressing barriers to student learning. *Reading & Writing Quarterly, 15*: 327-349.

Adelman, H. S., & Taylor, L. (1997). Addressing barriers to learning: Beyond school-linked services and full service schools. *American Journal of Orthopsychiatry, 67*, 408-421.

Adelman, H. S., & Taylor, L. (1998). Involving teachers in collaborative efforts to better address the barriers to student learning. *Preventing School Failure, 42*, 55-60.

Adelman, H. S., & Taylor, L. (Guest Editors) (1999). Addressing barriers to student learning -- Systemic changes at all levels. Theme issue. *Reading & Writing Quarterly, 15*.

American Youth Policy Forum (August 2000). *High Schools of the Millennium: Report of the Workgroup*.

Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principles can make a difference*. San Francisco: Jossey-Bass.

Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents (1989). *Turning Points: Preparing American Youth for the 21st Century*. Washington, DC: Author.

Center for Mental Health in Schools (1996). *Policies and practices for addressing barriers to student learning: Current status and new directions*. Los Angeles: Author.

Center for Mental Health in Schools (1997). *Addressing barriers to student learning: Closing gaps in school/community policy and practice*. Los Angeles: Author.

Center for Mental Health in Schools (1998). *Restructuring boards of education to enhance schools' effectiveness in addressing barriers to student learning*. Los Angeles, CA: Author.

Center for Mental Health in Schools. (1999 a). *School-community partnerships: A Guide*. Los Angeles: Author.

Center for Mental Health in Schools. (1999 b). *Policymakers' guide to restructuring student support resources to address barriers to learning*. Los Angeles: Author.

Center for Mental Health in Schools (1999c). *Pioneer initiatives to reform education support programs*. Los Angeles: Author.

Center for Mental Health in Schools (1999d). *A sampling of outcome findings from interventions relevant to addressing barriers to learning.* Los Angeles: Author.

Cunningham, W. G., & Gresso, D. W. (1993), *Cultural leadership: The culture of excellence in education.* Boston: Allyn and Bacon.

Donahoe, T. (Dec., 1993). Finding the way: Structure, time, and culture in school improvement, *Phi Delta Kappan*, 298-305.

Elmore, R. F., & Associates. (1990). *Restructuring schools: The next generation of educational reform.* San Francisco: Jossey-Bass.

Fuhrman, S. H. (Ed.) (1993). *Designing coherent education policy: Improving the system.* San Francisco: Jossey-Bass.

Fullan, M. G., & Stiegelbauer, S. (1991). *The new meaning of educational changes* (2nd ed.). New York: Teachers College Press.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age.* New York: Teachers College Press.

Lawson, H., & Briar-Lawson, K. (1997). *Connecting the dots: Progress toward the integration of school reform, school-linked services, parent involvement and community schools.* Oxford, OH: The Danforth Foundation and the Institute for Educational Renewal at Miami University.

Melaville, A. & Blank, M. J. (1998). *Learning together: The developing field of school-community initiatives.* Flint, MI: Mott Foundation.

National Education Commission on Time and Learning (1994). *Prisoners of time.* Washington, DC: U. S. Government Printing Office.

Rosenblum, L., DiCecco, M. B., Taylor, L., & Adelman, H. S. (1995). Upgrading school support programs through collaboration: Resource Coordinating Teams. *Social Work in Education, 17*, 117-124.

Sarason, S. B. (1996). *Revisiting "The culture of school and the problem of change."* New York: Teachers College Press.

Schorr, L. B. (1997). *Common purpose: Strengthening families and neighborhoods to rebuild America.* New York: Anchor Books.

Tyack, D., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public school reform.* Cambridge, MA: Harvard University Press.

Urban Learning Center Model (1995). *A design for a new learning community.* Los Angeles: Los Angeles Educational Partnership.

*In addition, go to the Quick Find and other search features on the Center's website, and you will find many relevant resources to topics discussed in this Unit. From the Center website, you can also access the ERIC system and other resource centers through the feature "A Gateway to a World of Resources."

A Sample of Resource Packets from Our Center

Volunteers to Help Teachers and School Address Barriers to Learning

Outlines (a) the diverse ways schools can think about using volunteers and discusses how volunteers can be trained to assist designated youngsters who need support, (b) steps for implementing volunteer programs in schools, (c) recruitment and training procedures and (d) key points to consider in evaluating volunteer programs. The packet also includes resource aids and model programs.*

Welcoming and Involving New Students and Families

Offers guidelines, strategies, and resource aids for planning, implementing, and evolving programs to enhance activities for welcoming and involving new students and families in schools. Programs include home involvement, social supports, and maintaining involvement.*

What Schools Can Do to Welcome and Meet the Needs of All Students and Families

This guidebook offers program ideas and resource aids that can help address some major barriers that interfere with student learning and performance. Much of the focus is on early-age interventions; some is on primary prevention; some is on addressing problems as soon after onset. The guidebook includes the following: Schools as Caring, Learning Environments; Welcoming and Social Support: Toward a Sense of Community Throughout the School; Using Volunteers to Assist in Addressing School Adjustment Needs and Other Barriers to Learning; Home Involvement in Schooling; Connecting a Student with the Right Help; Understanding and Responding to Learning Problems and Learning Disabilities; Response to Students' Ongoing Psychosocial and Mental Health Needs; Program Reporting: Getting Credit for All You Do and; Toward a Comprehensive, Integrated Enabling Component.

Protective Factors (Resiliency)

Contains a sample of diverse resources and links to other resources and information. Topics include: (1) Protective Factors and Resistance to Psychiatric Disorder; (2) Fostering Resiliency; and (3) Intervening in the School, Home, and Community. Approaches the topic of fostering resilience as an inside-out, deep structure process of changing our own belief systems to see resources and not problems in youth, their families, and their cultures. Fostering resilience also is seen as requiring a focus on policy. *

Using Technology to Address Barriers to Learning

This sampler highlights a range of intervention activities that can benefit from advanced technological applications and some of the categories of tools that are available. *

Cultural Concerns in Addressing Barriers to Learning

Highlights concepts, issues and implications of multiculturalism/cultural competence in the delivery of educational and mental health services, as well as for staff development and system change. This packet also includes resource aids on how to better address cultural and racial diversity in serving children and adolescents. *

Parent and Home Involvement in Schools

Provides an overview of how home involvement is conceptualized and outlines current models and basic resources. Issues of special interest to under-served families are addressed. *

Guiding Parents in Helping Children Learn

Specially designed for use by professionals who work with parents and other nonprofessionals, this aid consists of a "booklet" to help nonprofessionals understand what is involved in helping children learn. It also contains information about basic resources professionals can draw on to learn more about helping parents and other nonprofessionals enhance children's learning and performance. Finally, it includes additional resources such as guides and basic information parents can use to enhance children's learning outcome. *

Least Intervention Needed: Toward Appropriate *Inclusion* of Students with Special Needs

Highlights the principle of *least intervention needed* and its relationship to the concept of *least restrictive environment*. From this perspective, approaches for including students with disabilities in regular programs are described. *

Sampling of Outcome Findings from Interventions Relevant to Addressing Barriers to Learning

In this results-oriented era, it is essential to be able to reference programs that report positive findings. This document provides information on outcomes from a sample of almost 200 programs. Instead of simply providing a "laundry list", the programs are grouped using an enabling component framework of six basic areas that address barriers to learning and enhance healthy development: (1) enhancing classroom-based efforts to enable learning, (2) providing prescribed student and family assistance, (3) responding to and preventing crises, (4) supporting transitions, (5) increasing home involvement in schooling, and (6) outreaching for greater community involvement and support – including use of volunteers.*

Common Psychosocial Problems of School Aged Youth: Developmental Variations, Problems, Disorders and Perspectives for Prevention and Treatment

This five-part resource provides frameworks and strategies to guide schools as they encounter common psychosocial problems including five of the most common "syndromes" students manifest and schools agonize over. These are attention problems, conduct and behavior problems, anxiety problems, affect and mood problems, and social and interpersonal problems. It also explores ways to increase a school's capacity to prevent and ameliorate problems. *It is designed as a desk reference aid.**

Working Together: From School-Based Collaborative Teams to School -Community-Higher Education Connections

Discusses the processes and problems related to working together at school sites and in school-based centers. Outlines models of collaborative school-based teams and interprofessional education programs.*

Dropout Prevention

Highlights intervention recommendations and model programs, as well as discussing the motivational underpinnings of the problem.*

Learning Problems and Learning Disabilities

Identifies learning disabilities as one highly circumscribed group of learning problems, and outlines approaches to address the full range of problems.*

Attention Problems: Intervention and Resources

This packet serves as a starting point for increasing awareness of assessment and treatment of attention problems. Included are excerpts from a variety of sources, including government fact sheets and the classification scheme developed by the American Pediatric Association. "Symptoms" are discussed in terms of degree of severity and appropriate forms of intervention-ranging from environmental accommodations to behavior management to medication.*

Social and Interpersonal Problems Related to School Aged Youth

This packet synthesizes fundamental social and interpersonal areas of competence and related problems. The range of interventions discussed stress the importance of accommodations, as well as strategies designed to change the individual. References, resources, and cadre members are also listed.*

Violence Prevention and Safe Schools

Outlines selected violence prevention curricula and school programs and school-community partnerships for safe schools. Emphasizes both policy and practice.*

Conduct and Behavior Problems in School Aged Youth

In this introductory packet, the range of conduct and behavior problems are described using fact sheets and the classification scheme from the American Pediatric Association. Differences in intervention needed are discusses with respect to variations in the degree of problems manifested and include exploration of environmental accommodations, behavioral; strategies, and medication. Also provided is a set of references for further study and, as additional resources, agencies and websites are listed that focus on these concerns. *

Addressing Barriers to Learning: A Set of Surveys to Map What a School Has and What It Needs

Surveys are provided covering six program areas and related system needs that constitute a comprehensive, integrated approach to addressing barriers and thus enabling learning. The six program areas are (1) classroom-focused enabling, (2) crisis assistance and prevention, (3) support for transitions, (4) home involvement in schooling, (5) student and family assistance programs and services, and (6) community outreach for involvement and support (including volunteers).*

Least Intervention Needed: Toward Appropriate *Inclusion* of Students with Special Needs

Highlights the principle of *least intervention needed* and its relationship to the concept of *least restrictive environment*. From this perspective, approaches for including students with disabilities in regular programs are described. *

Responding to Crisis at a School

Provides a set of guides and handouts for use in crisis planning and as aids for training staff to respond effectively. Contains materials to guide the organization and initial training of a school-based crisis team, as well as materials for use in ongoing training and as information handouts for staff, students, and parents. *

New Directions in Enhancing Educational Results: Policymakers' Guide to Restructuring Student Support Resources to Address Barriers to Learning

The purpose of this guidebook is to (a) clarify why policy makers should expand the focus of school reform to encompass a reframing and restructuring of education support programs and services and (b) offer some guidance on how to go about doing so. It is divided into two major sections. The first deals with the question: Why restructure support services? In addition to discussing the need, ideas for new directions are outlined. The emphasis is on reframing how schools' think about addressing barriers to learning with a view to systemic reforms aimed at establishing comprehensive, multifaced approaches. The second section discusses how to go about the process of restructuring so that such approaches are developed effectively. The guide also includes several appendices to expand on key matters and a section containing some tools to aid those who undertake the proposed reforms.*

School-Community Partnerships: A Guide

This document was developed with three objectives in mind: to enhance understanding of the concept of school-community partnerships; to convey a sense of the state of the art in a way that would underscore directions for advancing the field; to provide some tools for those interested in developing and improving the ways schools and communities work together in the best interests of young people and their families. The entire document is meant to be a toolkit. The material contained here can be drawn upon to develop a variety of resource aids. *

In addition to the above, the following articles may be of interest.

From Our Quarrterly Newsletter:

Labeling Troubled and Troubling Youth: The Name Game (Summer '96)

Underscores bias inherent in current diagnostic classifications for children and adolescents and offers a broad framework for labeling problems so that transactions between person and environment are not downplayed. Implications for addressing the full range of problems are discussed.*

Addressing Barriers to Learning: Closing Gaps in Policy & Practice (Sum '97)
Sums up the Center Policy Report [*Addressing Barriers to Student Learning: Closing Gaps in School/Community Policy and Practice*]*

Easing the Impact of Student Mobility: Welcoming & Social Support (Fall '97)
Underscores the vital role of welcoming and social support in every school's transition programs to appropriately address barriers to learning. Discusses phases, key tasks, elements, and activities to ensure that proper mechanisms and processes are in place.*

Denying Social Promotion Obligates Schools to Do More to Address Barriers to Learning (Fall '98)
Discusses major issues and trends related to social promotion from both an educational and psychosocial perspective. Highlighting this is the need for appropriate support to enable *all* students to learn and *all* teachers to teach effectively.*

School Community Partnerships from the School's Perspective (Winter '99)
Discusses issues related to school-community partnerships and collaborations. Recommendations to enhance school-community partnerships are offered with references for further reading.*

Connecting Counseling, Psychological, & Social Support Programs to School Reform (Winter, '00)
Discusses the relationship between a student's motivational level of readiness and their ability to learn. Recommendations include designs for reform aiming to increase motivational levels and the need to look at barriers that may prevent proper development and learning.*

Addressing Barriers to Learning & Promoting Healthy Development: A Usable Research-Base (Fall,'00)
A research base for policy makers identifying research clarifying the importance of and bases for initiatives to enhance social, emotional, and behavioral performance as an essential facet of improving academic performance.*

Published in Journals:

H.S. Adelman & L. Taylor (1998). Involving teachers in collaborative efforts to better address barriers to student learning. *Preventing School Failure, 42*(2), 55-60.

C. Lim & H. S. Adelman (1997). Establishing school-based collaborative teams to coordinate resources: A case study. *Social Work in Education, 19*(4), 266-277.

L. Taylor & H.S. Adelman (1999). Personalizing Classroom Instruction to Account for Motivational and Developmental Differences. *Reading & Writing Quarterly, 15*(4), 255-276.

H.S. Adelman, L. Taylor, & M.V. Schnieder (1999). A School-Wide Component to Address Barriers to Learning. *Reading & Writing Quarterly, 15*(4), 277-302.

L. Taylor & H.S. Adelman (2000). Connecting Schools, Families, and Communities. *Professional School Counseling, 3*(5), 298-307.

**** You may download the document through our website at: http://smhp.psych.ucla.edu***

Otherwise, a small fee is charged to cover copying, mailing, and handling for most items.
See our clearinghouse's order and invoice form on our website, or contact the center at:

School Mental Health Project/Center for Mental Health in Schools, Box 951563,
Department of Psychology, UCLA, Los Angeles, CA 90095-1563
Ph: (310) 825-3634 | Fax: (310) 206-8716 E-mail: smhp@ucla.edu

Also, use the Search feature (especially the Quick Find search) on our website to find resources quickly from our Center and elsewhere.

UCLA CENTER FOR MENTAL HEALTH IN SCHOOLS

Under the auspices of the School Mental Health Project in the Department of Psychology at UCLA, our center approaches mental health and psychosocial concerns from the broad perspective of addressing barriers to learning and promoting healthy development. Specific attention is given policies and strategies that can counter fragmentation and enhance collaboration between school and community programs.

MISSION: *To improve outcomes for young people by enhancing policies, programs, and practices relevant to mental health in schools.*

Through collaboration, the center will

- enhance practitioner roles, functions and competence
- interface with systemic reform movements to strengthen mental health in schools
- assist localities in building and maintaining their own infrastructure for training, support, and continuing education that fosters integration of mental health in schools

**Technical Assistance* **Hard Copy & Quick Online Resources*
**Monthly Field Updates Via Internet* **Policy Analyses*
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**Guidebooks & Continuing Education Modules*
**National & Regional Networking*

Co-directors: Howard Adelman and Linda Taylor
Address: UCLA, Dept. of Psychology, 405 Hilgard Ave., Los Angeles, CA 90095-1563.
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**In 1995, two national training and technical assistance centers focused on mental health in schools were established with partial support from the U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health. A new five year cycle of support was awarded in 2000 with co-funding from the Substance Abuse and Mental Health Services Administration's Center for Mental Health Services. As indicated above, our center is located at UCLA; the other center is at the University of Maryland at Baltimore and can be contacted toll free at 1-(888) 706-0980

What is the Center's Clearinghouse?

The scope of the Center's Clearinghouse reflects the School Mental Health Project's mission -- to enhance the ability of schools and their surrounding communities to address mental health and psychosocial barriers to student learning and promote healthy development. Those of you working so hard to address these concerns need ready access to resource materials. The Center's Clearinghouse is your link to specialized resources, materials, and information. The staff supplements, compiles, and disseminates resources on topics fundamental to our mission. As we identify what is available across the country, we are building systems to connect you with a wide variety of resources. Whether your focus is on an individual, a family, a classroom, a school, or a school system, we intend to be of service to you. Our evolving catalogue is available on request; and available for searching from our website.

What kinds of resources, materials, and information are available?

We can provide or direct you to a variety of resources, materials, and information that we have categorized under three areas of concern:

- Specific psychosocial problems
- Programs and processes
- System and policy concerns

Among the various ways we package resources are our *Introductory Packets, Resource Aid Packets, special reports, guidebooks,* and *continuing education units.* These encompass overview discussions of major topics, descriptions of model programs, references to publications, access information to other relevant centers, organizations, advocacy groups, and Internet links, and specific tools that can guide and assist with training activity and student/family interventions (such as outlines, checklists, instruments, and other resources that can be copied and used as information handouts and aids for practice).

Accessing the Clearinghouse

- E-mail us at **smhp@ucla.edu**
- FAX us at (310) 206-8716
- Phone (310) 825-3634
- Write School Mental Health Project/Center for Mental Health in Schools, Dept. of Psychology, Los Angeles, CA 90095-1563

Check out recent additions to the Clearinghouse on our Web site
http://smhp.psych.ucla.edu

All materials from the Center's Clearinghouse are available for order for a minimal fee to cover the cost of copying, handling, and postage. Most materials are available for free downloading from our website.

If you know of something we should have in the clearinghouse, let us know.